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Moorend Old Farm, Winterbourne, Glos.

(*See page* 685.)

MEETINGS

FRIDAY, *October* 24.

Institution of Structural Engineers (*Lancashire and Cheshire Branch*). Mr. E. S. Andrews on "Some Notes on Structural Engineering at the new Olympia Extensions." At the Law Association Rooms, Liverpool. 7 p.m.

Institution of Structural Engineers (*Midland Counties Branch*). Mr. V. H. Lawton on "Building Construction and its demands upon the Structural Engineer." At the Chamber of Commerce Building, Birmingham. 6.30 p.m.

Institution of Mechanical Engineers. Informal Meeting. 7 p.m.

SATURDAY, *October* 25.

L.C.C. Central School of Arts and Crafts. Visit to Messrs. Johnson's Works, Dartford. 2 p.m.

Institution of Municipal and County Engineers. Institution Meeting. At the Town Hall, Colwyn Bay. 11 a.m.

MONDAY, *October* 27.

Architectural Association. Mr. G. Grey Wornum on "Diagonal Views." 7 p.m.

WEDNESDAY, *October* 29.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher, P.R.I.B.A., on "Italian Mediæval Architecture." At Southampton-row, W.C.1. 6 p.m.

Liverpool Architectural Society. Opening address by the President, Professor L. P. Abercrombie. At Bluecoat Chambers, School-lane. 5 p.m.

St. Paul's Ecclesiological Society. Sir Chas. A. Nicholson, Bart., F.R.I.B.A., on "Stained Glass." At 9, Conduit-street, W.1. 8 p.m.

THURSDAY, *October* 30.

Society of Antiquaries. Dr. E. C. Curwen and Mr. R. P. Ross Williamson on "The Date of Cissbury: Report on Excavations undertaken by the Worthing Archæological Society."

Architecture Club. Discussion on "Function, as expressed in modern Swedish Architecture." To be opened by Professor C. H. Reilly. At 34, Bedford-square, W.C.1. 7 p.m.

FRIDAY, *October* 31.

Nettleson Players. Play entitled "It Pays to Advertise." At King George's Hall, W.C.1. 7.30 p.m.

Eastbourne College War Memorial Building: General View of Tower, from East.

MESSRS. SYDNEY TATCHELL AND GEOFFREY C. WILSON, FF.R.I.B.A., Architects.

PLAIN AND SIMPLE.

MANY charming essays have been written round about the simple things in life—simple pleasures, simple tastes, and so on. Quite rightly, the true essayist avoids the temptation to press the moral; he preserves his air of candid disengagement. We have therefore to look elsewhere—and we look in vain—for a reasoned philosophy upon simplicity and the simple. There is a need, we think, for some working definition of words that are being used constantly to convey certain impressions to different theories and philosophies. We refer in particular to theories of æsthetics applied to architecture and furniture.

A number of recent books upon æsthetics leave us with the impression that efficiency and simplicity are synonymous terms, and that the words simple, tradition, and rationalism may be interchangeable. Some of these words are the parents of the offspring known in modern æsthetic jargon as the usefully beautiful or beautifully useful. It is not a new development in the history of æsthetics that there should be a vogue for simple things. These developments are periodic and differ only in their causes. At the moment there is an exploration for a new style of purely rational construction—a style determined by modern conditions of life, new materials, and new methods of production. In essence it is a healthy development, a sort of mental stock-taking or spring cleaning. A good deal of lumber goes by the board, and much depends upon how far we push our theories upon the bare bones we have exposed and our theories upon reclothing them. We may not want to reclothe them: we may want to appear to be very simple because we are very rational. The point arises, however—and it is always overlooked—that what may appear to be a simple issue is approached by minds that are complicated. Danger begins when a new philosophy develops into a new movement and becomes hardened into a creed.

There are several obvious dangers in pressing the theory that the simple and the beautiful are the by-products of sheer function and efficiency. Logical solutions to practical problems develop too easily into a slogan for capturing beauty. The statement that a thing made well for use is a thing made beautifully, seems to have been accepted as being simple and obvious. It is quite true that all we ask of a gun is that it shall shoot straight and well, but it is not true to say that all of us regard it as a beautiful thing because it was fashioned by craftsmen with an almost loving concentration upon utility. There are obvious gaps in this philosophy. We know of hundreds of things that are—so far as we know—efficient in the functional sense, but they are undoubtedly ugly. Nor is the offence lessened by the excuse that they are simple, and consequently free from criticism. To go even further we are asked to admire these things for their beauty of downrightness. The familiar fallacy that beauty is efficiency is answered by Mr. Charles Marriott. "It all depends," he says, "upon what you mean by efficiency. If you mean only mechanical efficiency, of course it is a fallacy; but does anybody—can anybody, at this time of day—mean that? Surely, what is meant is efficiency for all the purposes involved, moral as well as material."

Judging from illustrations we have seen we fear that many people either take the limited view of efficiency or are determined to appear simple by thinking along certain lines. A water tap or a stove pipe exposed in a living-room certainly have the appearance of being real, and no doubt they work for efficiency. To claim any beauty for them, as has been done, on the plea that they are efficient and simple with no nonsense about them, is to give rise to another cult in place of the one that is condemned. The other affectation of simplicity is well known and scheduled: it is acquired by people who are potentially complicated, who vainly hope to secure simplicity by copying what are supposed to be the simple things evolved by people who were, if not simple minded, at least free from self-consciousness. We see the affectation in the sham cottage big enough for a mansion, and we get the humorous side from *Punch*, where the new domestic glancing round the living-room of an "old world home" remarks to her mistress: "I think I ought to be very comfortable here. This is such a nice kitchen." We are inclined to wonder whether the newer affectation will lead us to something more like a nice factory. The simplicity we are offered does not seem to emerge as the unstudied, spontaneous products their designers would have us believe. They might deny any attempt at deliberate designing, but there seems to us to be an affectation nevertheless as arbitrary as the stylistic or traditional conceptions of the simple.

It is, therefore, one of the dangers we mention that where some are honestly working on sound reasoning, there are others who appear to be copying what they have come to regard as a novelty. They praise a design for virtues it does not possess: they disclaim any stylistic traditional forms, and follow a new style that is modern but, apparently, just as arbitrary. In one of Mr. Aldous Huxley's books—we forget which—he describes one of his characters as being too simple to be interesting. She was simple only as a child was simple or as an imbecile is simple. "Simplicity is no virtue unless you are potentially complicated." This cynical observation seems to hold good in art. Traditional work at some period was easy because it was natural and free from self-consciousness, and it is probable that the day has gone when it can be said with truth that any design is free from self-consciousness, whether it is stylistic or plain sugar-cube architecture, bred out of rationalism and functionalism. Any conception of the word simple in a theory of æsthetics does suggest the quality of artlessness, whereas a conscious striving after simplicity may achieve nothing but plainness. In this there is a possible source of danger from the plagiarist upon whom the theory of the plain and simple may be pressed too hard. He cannot see the distinction between simple things made by people free from self-consciousness, and what he supposes to be simple things made by people who are potentially complicated. Perhaps the late Mr. Clutton Brock got near to the truth when he said that peasant art is produced by peasants not by lonely artists.

We repeat that it is a healthy sign to return now and again to first principles. The underlying idea, therefore, of making beauty dependent upon practical values is also a healthy doctrine, but much depends upon how far the theory is stressed, or rather, how far it is misunderstood. It is easy, apparently, to slide into a wrong conception of simplicity and plainness, and easy to forget that there are other graces and virtues beyond mere functional and utilitarian ends. In an age that seems to be making a god of efficiency as a remedy for every social and industrial trouble, we do not wonder that architecture and art generally have been brought into the one fold to stand the same tests. What we fear most is the fatal tendency to slide further into a theory that claims to find complete satisfaction in the appearances of mechanical efficiency. An earlier generation exploited the same theory without even thinking aloud about it, and, as a result, this generation has been busy for many years trying to find reasons to account for its inheritance of ugliness.

NOTES

London Squares.

It is learnt that as the Government commitments for the next session of Parliament are such as to preclude the introduction of a Bill sponsored by the Minister of Health that would secure the protection of the London squares, the London County Council propose themselves to make preparation for the introduction of a Bill based upon the findings of the Royal Commission on London Squares. The Bill, we learn, includes all the enclosures in respect of which the Royal Commission recommended statutory protection should be sought. Those persons who have seen with concern the gradual encroachment of buildings upon one or other of the London squares, and have observed the perils and injustice of permitting the main brunt of resisting that encroachment to fall upon the shoulders of the tenants of the property surrounding such squares, will greet this proposed measure with relief. It has come not a moment too soon.

Canterbury City Wall.

A letter from Mr. W. D. Caröe, F.R.I.B.A., in *The Times*, calls attention to a proposal which all who know their Canterbury will view with grave apprehension. Mr. Caröe writes:—"As the result of a scheme, to which the Dean and Chapter contributed, the Corporation has been able to acquire the site of the Star Brewery, which had been built up against the old City Wall. The buildings have now been removed, thus disclosing a long and perfect stretch of what is one of the most magnificent examples of mediæval fortification, some part of it almost certainly going back to Roman times. . . . It seems almost incredible, but I believe it to be a fact, that, in order to avoid a comparatively small expense, the Corporation is now proposing to fill up the ditch with earth to a level which will leave even less of the wall visible for part of its length than was to be seen when the brewery buildings were standing. This new proposal, in sequence to the other, may really make those who love Canterbury wonder if the responsible city authorities are conscious of the greatness of their inheritance from the past, which is also no small element in their present prosperity."

The Planning of Washington

Town planners and architects, whose greatest problem is replanning country and built-up areas, will have heard with some feelings of envy the statement made by Mr. Frank Baldwin at the R.I.B.A. that the layout of Washington along the lines of the McMillan report would cost, at first intention, £40,000,000, and that it was well realised that this was only a preliminary estimate. One can visualise what the expenditure of even one-quarter of that sum would do for London. But it must be realised that treatment on the grand scale as in Washington—with mighty axes and compelling vistas—is not, perhaps fortunately, possible for the Central London area, with its tortuous and irregular layout. The application of such a sum for obtaining better control of the Greater London area would, however, produce invaluable results.

The Braid Hills.

Mr. William Davidson, in a recent letter to *The Scotsman*, draws attention to the gradual ruination of the Braid Hills, those beautiful Edinburgh highlands, and especially to the lovely little Hermitage wood. "This tiny, romantic, natural sanctuary of wild life," he writes, "should be preserved for all time. This whole valley between the Blackford and Braid Hills teems with wild life of a kind rarely found within a city's bounds. The owl, the magpie, the hawk, the hare, the weasel, the pheasant, the partridge, and all kinds of finches haunt this glen, and even the wild duck has been seen on the little pond between Mortonhall and the golf course. Slowly but surely the glen is being invaded from both ends by the bungaloid, fungoid growth. What better investment could the city have than this whole area scheduled as a municipal wild animal sanctuary and park? This is a matter for the Cockburn Association, the Association for the Preservation of Rural Scotland, and the Town Planning Committee."

The Calton Hill.

The fear that the Calton Hill is in danger of being defaced by the erection of an oblong block of public offices has undoubtedly done something towards the stimulation of Scottish "nationalism." Whatever nationalism may mean in its wider aspects, everyone can appreciate that national and civic feelings should be respected. In short, the question is altogether bigger than any professional opinion upon the merits of public or private services in the field of architecture. It must be remembered, too, that this threat comes at a time when national feeling has been touched deeply by the impressiveness and beauty of its National War Memorial in the same city.

Stevenson and Edinburgh.

Any threat to Edinburgh must lead to a re-reading of Stevenson. At once we come across an old favourite that has a universal application. "It is one of the most common forms of depreciation to throw cold water on the whole by adroit over-commendation of a part, since everything worth judging, whether it be a man, a work of art, or only a fine city, must be judged upon its merits as a whole." Evidently it is the belief of all true lovers of Stevenson that the proposed building on the Calton Hill is not likely to suffer from over-commendation.

The New Victoria Theatre, S.W.: Circle Foyer.
Messrs. W. E. Trent and E. Wamsley Lewis, Associated Architects.
See page 691.)

An Architectural Stamp.

On October 15 the Irish Free State issued a stamp commemorative of achievement in harnessing the river Shannon. The stamp represents the dam which holds up thirty feet of water at O'Briensbridge, near Killaloe. Not only does this stamp illustrate a great piece of engineering, but it shows a

The Shannon Commemorative Stamp.

structure possessing the qualities of dignity and repose that should provide the architectural setting for such a work. Only those who were fortunate enough to visit the scheme during its construction can realise the amount of work that lies concealed beneath the water. The scheme has for some time been in partial operation, and it is understood that the full programme will not be long in maturing, more especially if the Drumm electrical storage battery emerges successfully from the tests that are now being carried out by the Great Southern Railway, with apparently excellent results. We published some photographs of the Shannon scheme during construction in our issues of June 11, 1926, and September 14, 1928.

Moorend Farm, Gloucestershire.

Moorend Farm, Winterbourne, Gloucestershire, part of which bears the date 1676, is situated amidst most picturesque surroundings, as will be seen from our views. The garden is a riot of bloom and colour, yet these beautiful old buildings are falling into a sad state of decay. Cromwell's troops are said to have rested here and stabled their horses in the extensive range of stables and outbuildings, which are of an architectural character. Agriculture in this country must be in a bad state indeed when one sees these historic old buildings decaying and the farmyards lacking stock.

The Green Cross Society.

The Green Cross Society has been formed to protect the countryside from the desecration of litter. By the nature of its title it will, no doubt, make an appeal to many of those who have failed to realise that they have been guilty of out-of-door slovenliness. It is to be hoped that this is the last opportunity the public will have to learn the distinction between good manners and behaviour, as seen by decent and orderly minds, and good behaviour that society is compelled to make compulsory to protect itself. The one is voluntary; the other is legislation. There is no need to put too fine a point upon it; the countryside has suffered from none other than dirty habits. Society has been more than generous in giving the public another chance of seeking a cure under the symbol of the Green Cross.

Our Betters.

"Don't forget to speak scornfully of the Victorian age; there will be time for meekness when you try to better it." Thus spoke Sir J. M. Barrie to youth at St. Andrews University. It is certain that we have never ceased to pour scorn upon the Victorian age, and it is equally certain that, so far as ugliness is concerned, we have not bettered it. In this connection Mr. Clough Williams-Ellis, in "The Face of the Land," speaks of our civilisation as being dangerously ill-balanced. Our theories have been shattered—"exploded by petrol in a million obedient engines . . . in short, we have learnt, not without bitterness, that to go as you please is not always to arrive at what is pleasant."

Different Opinions.

No doubt many are learning the lesson through bitterness, but is it the same lesson? There are those who account for Victorian ugliness by saying that trade was good, and no doubt a generation hence many will be able to account for our ugliness by saying that trade was bad. Much of the time that is spent in finding obscure reasons could be put to much better use. On the other hand there is much truth in Mr. Ronald Knox's opinion that in our public activities, relating to buildings and bridges, our reverence for the past has made us self-conscious and frightened of the future. "We have criticised our grandfathers so freely that we are nervous about how our grandchildren will criticise us." We could wish that everyone took this self-conscious view when they see rural England disappearing before their eyes.

Violent Criticism.

Mr. Beverly Nichols, in "The Star Spangled Manner," finds the opportunity for thinking aloud and for giving civilisation a good talking-to. He is writing about the purchase by America of our art treasures, old houses and buildings. "It seems strange," he says, "that we should only discover our affection for old buildings when they are coveted by somebody else. During the last ten years in London we have cheerfully submitted to an appalling holocaust of old buildings. And with very few protests we have allowed to be erected, in their stead, a series of architectural monstrosities which are calculated to induce a nervous breakdown in anybody who is brave enough to contemplate them. As long as we continue to endure, for instance, the obscene mess which has sprung up, like a line of evil, mis-shapen toad-stools down Regent-street, we have no sort of justification for protesting against the wholesale removal of our buildings. We ought to be thankful that they are being taken to a safe place." One is inclined to doubt the sincerity of this violent criticism, which seems to be merely an outlet for facetiousness. As a criticism it does not convey to us a steady, penetrating or tolerant vision either of the particular problem or of life.

The L.C.C. and the Building Act.

We publish in this issue (page 710) the first of a series of analytical articles by Captain W. T. Creswell on the London Building Act, 1930. It may be here recorded that the Building Acts Committee has already recommended certain amendments, which, however, after discussion, have been withdrawn. The proceedings of the Conference on Steel Structures Research, reported on page 707, are of special interest in connection with the Act.

Moorend Old Farm, Winterbourne, Glos.

GENERAL NEWS

Professional Appointment.

Mr. Henry A. Mackmin, F.S.I., and Mr. S. T. Saunders, P.A.S.I., Chartered Quantity Surveyors, are removing from 10, Vigo-street, W.1, to 23, Golden-square, Regent-street, London, W.1, on October 29. The telephone number (Gerrard 7206) remains unaltered.

Two Appointments.

The Building Acts Committee of the L.C.C. recommend that Mr. Horace William Cubitt be appointed district surveyor for the City of London East, in the place of the late Mr. John Todd. Also, that Mr. Alfred Ernest Mayhew, at present district surveyor of Deptford, be appointed to the district surveyorship of the City of London West. Both appointments are to date as from November 12.

Proposed Increase of Staff, Essex County Council.

In view of the increase of work in the architectural department, the General Purposes Committee of the Essex County Council has recommended that the establishment of the department be increased by two senior assistant architects, one architectural assistant grade three, one senior assistant quantity surveyor, one junior assistant quantity surveyor. This was agreed to.

Election of City Alderman.

The resignation of Sir John Baddeley has left a vacancy on the City Aldermanic Bench, which the electors of Cripplegate Ward are asked to fill on Tuesday next, October 28. On this occasion an election will be necessary, as three candidates have been nominated. They are Sir William Prescott, C.B.E., D.L., Chairman of the Metropolitan Water Board, High Sheriff of Middlesex last year, and a member of the Court of Paviors' Company; Mr. James Dixon Mounsey, and Mr. H. E. A. Twyford. Sir William is closely connected with the architectural and engineering world, for he is a member of the Institution of Civil Engineers, member of the Institution of Mechanical Engineers, past-president and hon. fellow of the Institution of Sanitary Engineers, and hon. member of the Institution of County and Municipal Engineers.

Charing Cross.

The Political Correspondent of the *Evening Standard* on Wednesday night reports that the Advisory Committee on Charing Cross Bridge—presided over by Sir Leslie Scott—is about to make important announcements. The paragraph reads:—"Attention is now focussed on two schemes only, and one is considered to have great advantages over the other. The favoured scheme dismisses all proposals regarding tunnel or tunnels, and underground stations. It embodies the construction of a bridge, a new Southern terminus near the present Waterloo Station, clearances on the south side, and the removal of the present Charing Cross Station and Hotel. But it departs, as regards the north, or Strand side, from all previous schemes, by providing two roads from the new bridge—one on the Strand level and the other over the Strand by a bridge towards the north-east of St. Martin's-lane, which would be widened. If the principles are approved, it is intended to throw the design of the new bridge open for competition. Directly the London County Council are assured that it is a certainty and will be begun without delay, operations for the reconstruction of Waterloo Bridge will be begun."

COMPETITION NEWS

Proposed Development Scheme, Brighton.

A special committee of the Brighton T.C. considering the matter of utilisation of a site in West-street have recommended the promotion of a competition for designs for the construction of a sea-water swimming-bath. It is suggested that the scheme should include medicinal baths, a rheumatic clinic, shops, indoor bowls, and car-parking facilities.

ARCHITECTURE AND CIVIC FORCES

Sir Banister Fletcher, P.R.I.B.A., at the Central School of Arts and Crafts, on Wednesday last, gave an illustrated lecture on the Early Mediæval or Romanesque architecture of the hilltop cities and the cities of the plain of Central Italy. He said that the wonderful reawakening of mediæval civic life in Italy made it possible for little cities like Pisa to undertake grand works of architecture beautiful enough to go down to posterity. Each city, guided by its great families, developed its own resources and strove to outshine neighbouring cities with town-planning schemes and by the erection of palaces and churches. Then the craftsman had his recognised work and place in the scale of civic life. The architecture of Pisa drew, like a magnet, people from all parts of the world, and reflected through all the ages the varied enterprise of her citizens in that building art which touched human life at all points and involved questions of land and housing, of town-planning and public work. The world-famed Leaning Tower, the Cathedral, with its arcaded west front, and the richly adorned Baptistery, constituted one of the best known examples of collective planning of important buildings in the past, and this group held a place in Italian fame like the Acropolis, Athens, in Greece and the Roman Forum in Rome. A rising spirit of civic independence, coupled with religious idealism, prompted this trio of splendid monuments, and the bells still rang out from the Campanile bell-tower to call the faithful to worship as they had done for centuries. Pisa afforded one of those striking instances in which the art of the conqueror was coloured by the art of the conquered, for the banding in coloured marbles was undoubtedly due to Saracenic influence from Sicily.

ST. PAUL'S FINAL REPORT

The final meeting of the Representative Committee for the Preservation of St. Paul's Cathedral was held at the Deanery on Monday, when the tenth and final reports of the Works Committee were received. The following statement, signed by the Dean, was issued on Tuesday:—

"The Representative Committee at its final meeting yesterday received from the Works Committee its tenth report and also in addition its final report of the work done for the preservation of St. Paul's Cathedral. This final report gives clearly and fully an account of the history and character of the work which has been carried out. The Representative Committee offer their most cordial thanks to Sir Basil Mott, Sir George Humphreys, Mr. E. C. Trench, Colonel Sir Charles Morgan, and Captain C. S. Peach, the members of the Works Committee, who, under the chairmanship of Sir Basil Mott, have devoted their great abilities, entirely gratuitously, and with unceasing care, to the task entrusted to them. The Representative Committee also desire to express their strong sense of obligation to the late Sir Aston Webb, who served on our committee and attended, with great benefit to the work, the meetings of the Works Committee until his much regretted death. These thanks are offered on behalf not only of themselves but of the great City and Empire of which St. Paul's Cathedral is a sacred treasure. The Representative Committee wish further to express their appreciation of the special services rendered by the Cathedral Treasurer, Canon Alexander; the Cathedral Architect, Sir Mervyn Macartney; Mr. E. W. Bolwell, the Clerk of the Works; and Mr. W. G. Allen, the Assistant Architect in charge of the works."

Brickwork Detail from New House in Rhijl. Professor Schaidt, Architect. (*See page 688.*)

CORRESPONDENCE

State of the Architectural Profession.

SIR,—Your correspondent, G. L. W. B., refers to the present state of affairs, and states that "by the end of the present century the unfit will have perished and that those who are now in training and their successors will reap the profit. Had this course been followed forty years ago, the present state of affairs would never have arisen." Surely the answer is that a similar course was followed about forty years ago, and yet the present state of affairs has arisen; for about forty years ago men in recognised positions were admitted to the Institute without examination; the doors were then closed and the admittance had to be by examination; but unfortunately thousands of architects have been admitted recently to the Institute; they are entitled to call themselves Chartered Architects, and they have never passed any examination. There is only one class of architects who can claim, as a class, to be properly qualified: I refer to the Associates, for they have objected to unqualified men being included in their ranks.

We all know that Chartered Accountants and Chartered Surveyors are qualified men, but no one with any knowledge of the facts could claim that Chartered Architects are, *ipso facto*, qualified men. Every Associate of the Institute should use the affix A.R.I.B.A., and avoid calling himself a Chartered Architect, otherwise the public, which is beginning to sit up and take notice, may class him with those thousands of unqualified men I refer to above.

JUNIOR.

Architecture as a Profession.

SIR,—I wonder whether anyone has any idea how many practising architects there are in England alone, leaving Scotland and Ireland out of the calculation. It would also be interesting to know how many plans for buildings annually built or altered have been prepared by a practising architect. As it may be assumed that directly architects are registered the temptation to adopt architecture as a profession is likely to be strengthened, now is the time to consider the situation.

In the old days it was quite usual for an architect to open an office and promptly take one or more pupils. At that period specifications had to be written and copied by hand, and every drawing had to be traced and coloured, so that a pupil became a useful asset from the start. Also, if he happened to be keen and intelligent, he learnt a considerable amount, and by the time his five years' pupilage was completed he had little difficulty in nding a situation as assistant in another office. The training of a pupil in the office of a busy practitioner was much the same, except that probably he was one of several pupils and came into very slight contact with the master mind. I am not at all sure that the smaller office did not provide the better instruction.

Now all this is altered and the number of assistants required in a really busy office is relatively few if an architect never accepts commissions for a greater volume of work than he can personally deal with in detail. Fifty years ago, or less, it was the rule rather than the exception for any architect who had gained distinction as an artist in design to do this. Those who valued exceptional ability expected to be charged and paid a special fee, and very often waited months rather than go elsewhere. This attitude of the fashionable architect gave others a chance, and commissions were more distributed than is the case at present. Official architecture still further reduces the opportunities of private practice, and unless with registration, measures are taken to prevent registered architects acting in subordinate positions and without recognition of their share in design, the position of the young architect of the future will be pitiable.

In the debate on "Official Architecture" at the Building Exhibition, Mr. Wynn Owen's motion that "The Cause of Architecture is served equally by the Official Architect and the Private Practitioner" appears to have been carried by a small majority, but without knowing the composition of the meeting this is far from being decisive. Apparently Mr. Lanchester was the sole champion of the private practitioner. In reading the report of the debate I could find no definition of what may be considered "The Cause of Architecture."

The dictionary definition of architecture gives alternatively: (1) "The art or science of building," (2) "That branch of the fine arts which has for its object the production of edifices pleasing to a cultivated and artistic taste." Mr. Wynn Owen appears to have had the first in mind and Mr. Lanchester the second. Personally, I do not consider either definition particularly good. As we all know, the literal meaning of architect is "chief carpenter," and had its origin in the days of wood construction. Symbolically, it accurately describes the practical architect of to-day, but architecture is the outcome of the chief carpenter and the artist. The ideal architect, therefore, is only found in the perfect combination, and I am inclined to think that the artistic temperament would be non-existent in the architect who deliberately elects to become an official architect to any Government Department, County Council, or municipal body.

I do not class the architect of a large firm or business concern in the same category as the official architect who is paid and pensioned out of Imperial taxes or local rates to which the unhappy practising architect has to subscribe his quota. It is questionable whether any economy to taxpayers or ratepayers is secured by the appointment and maintenance of official architects, and if a close scrutiny were made into the incidental expenses of their appointments and work carried out by them the results would be surprising; nor is there the least necessity for work to be carried out under the direct supervision of official architects. Highly organised business firms realise this, and though they have their architect and a small staff to get out suggestive sketches and formulate schemes, the actual work is entrusted to practising architects and with the happiest results. Mr. Wynn Owen's comments on the handicaps of the practising architect are really rather naïve in so far as they go to show that the private practitioner has to work against time and study economy, whereas these considerations do not cramp the style of the calm official.

Now it is not the intention of this letter to consider the relative merits of official and private practice except in so far as the former encroaches on the work of private offices and must materially reduce the prospects of private practice in the future and lower the position and pay of qualified architects to that of ill-paid and unrecognised assistants. No Registration Bill will be of any use to architects nor advance the cause of an architecture that is standardised, and if the public buildings, hospitals, schools and houses are to be produced under the direction of officials-in-chief, however talented individually when they first take office, they are almost bound to be commercially rather than artistically minded, and, in the lapse of years between an appointment and retirement, can scarcely be expected to retain either alertness of mind or freshness of outlook, which fades away in dog or man when tied to a post allowing only a limited range of vision.

Any parent or guardian should weigh these possibilities very carefully before placing a student in an architect's office or an architectural school. Unless the situation is very fully explained, premiums or fees accepted for tuition are hard to justify.

ALTRUIST.

AMERICA'S PROBLEMS

AN INTERVIEW WITH MR. FRANK BALDWIN.

MR. FRANK C. BALDWIN, Secretary of the American Institute of Architects, has the supreme gift of caution—at least, in regard to his opinion on the Americanisation of some of our newer buildings. This, he disarmingly said, in an interview which he kindly granted to a representative of *The Builder*, he did not feel competent to discuss. But Mr. Baldwin, who delighted his audience at the Royal Institute of British Architects on Monday night with an account of the planning of Washington City, was perfectly willing to talk of other things—and did. For instance, the condition of the traffic in New York.

"The chaotic congestion of the streets on Manhattan Island," he said, "has reached a point which the authorities view with the greatest alarm. During the morning and evening business rushes it is almost impossible to progress by car or foot, and the big stores, employing thousands, have long adopted a system of 'staggered' hours—that is, one store opens at 8.30 o'clock, the next at 9, and the one after at 9.30, so as to give their staffs a better opportunity to get there to time. But in spite of this and other devices, the Traffic Control is seriously considering a system of two- and even three-decker streets for Manhattan. A tremendous step? Yes, but it may have to come."

"Would some control of the height of buildings not help?" we asked.

"That is not possible. As you know, the formation of Manhattan Island prevents all but vertical expansion. Besides, the pace is set by one or two companies which are after record-breaking. Why, I know of two buildings erected simultaneously, the architects of which wouldn't remove the scaffolding at the top for months lest the other side might see how high they really had got! But don't forget, please, that I'm speaking of New York. Detroit, Chicago, and other big cities have got their tall buildings, too, but the pressure is not so great by far. Some cities have a limit as, for example, Washington, which has a maximum of 130 feet and in certain places allows only 95 feet."

"You mentioned in your lecture," we reminded our host, "that the Secretary of the Treasury, Mr. Mellon, had the power to appoint any architect he pleased for a building. Is that to be taken to mean that the competition system is not popular in America?"

"That is so," Mr. Baldwin assented. "The A.I.A. does not encourage the system. We find it wasteful and it rarely gives satisfaction to the client. If it is not practicable to appoint an architect direct, we prefer to keep it down to a limited competition."

"Finally," we asked, "how is the position of the architect faring in view of the rise in power and importance of the structural engineer? Does he yet remain, as you would say, 'the head man'?"

"There may be troublesome times ahead," was the reply. "In the United States in recent years there has been an increasing tendency toward the development of great construction companies, which include in their organisations complete staffs of architects and engineers. It is a form of commercial competition which many of the architectural profession view with alarm. It is conceivable that in time this might result in a complete submergence of the professional ideal, but it can be said with equal force that such a result would be at the cost of a great loss in æsthetic values. The evidence of increasing public appreciation of the arts in America is so encouraging that it appears reasonable to believe that the highly-trained and cultured architect will always have a secure position in the community. It is also safe to assume, however, that this position can only be assured by avoiding all entangling commercial or contractual relations and rigidly maintaining a strictly professional attitude in the practice of architecture."

SOME NOTES ON GERMAN DESIGN AND MATERIALS.—I

By FRANK BENNETT, A.R.I.B.A.

The German travertine quarries are flourishing just now. From Stuttgart and Constatt comes a variety of the stone, similar in texture to the Italian travertine but warmer in colour, which ranks as a sort of standard material for the facing of walls to the shop fronts. *Fig.* 3, the portion of a porch projecting in front of an office building in Berlin, shows how it is used. All facing slabs are cut across the natural bed and show strong lamination marks, here and there broken by cavities which, however, are sometimes too big and have to be filled out with tinted stucco.

Onyx of similar graining and colour to the travertine is sometimes used because of its capacity for a higher polish, although it is not really a suitable material for outside wear and tear. Sometimes, again, travertine is imitated in stucco.

The window detail on page 686 is taken from a new house in Rheil by Prof. E. Schaidt. To emphasise the horizontal grouping of the windows the short intermediate piers are quite cunningly treated. The close pattern of projecting headers serves to confuse the structural identity of the piers and give them the appearance of decorated panels, and again, their liveliness, by contrast, sets off the smoother surface of the flat wall. The lead came divisions of the glazing are a further emphasis of the horizontal.

The idea of using mortar joints of different colours in one piece of brickwork is probably a new one; at least, in the way shown in the "Sparkasse" building—*Fig.* 1. Here the horizontal joints are alternately light and dark. The result, it will be seen, is a clever deception, for although the wall is really quite flat, every other course of brick appears to project, the dark joints being like the shadows underneath. If the vertical joints were white also instead of black, the suggestion of modelling would be even greater. No doubt the desire for some sturdiness in the appearance of the wall, suitable for a building of semi-official character, prompted this expedient.

Pier treatments offer scope for a number of new ideas. *Fig.* 2 shows the piers flanking one of the entrances to a new block of flats in the Leninser Strasse—designed by Eric Mendelsohn—which has an elevation quite plain and severe and otherwise only enlivened by its arrangement of solids and window openings. Although the decoration on the piers is simple and of little significance, it has the virtues of being entirely rational; of being, as a decoration, obviously superficial as applied to structional features; of being an adequate marking to the entrance, and of being inexpensive and capable of being carried out by a plasterer of average skill direct from the architect's detail.

The age-old method of panelling woods for the decoration of internal walls is now almost entirely superseded by the method of facing or lining, a change brought about by the manufacture of laminated ply-woods. As expansions and contractions do not take place in this material, pieces can be butt-jointed without fear of opening, and no cover mouldings are necessary. The wood-facing shown in *Fig.* 4, from a German café, is an example which compromises with traditional design, the vertical joints in the wood being exposed, while the horizontal ones are covered. Quartering shows off the grain to advantage and relieves the general flatness of the surface. Included in this scheme are conventionalised pictures of inlaid woods let into the walls in a manner preserving the general character of the wood lining.

The lining of theatre walls with mahogany ply-wood is popular, but the effect of it is not always completely successful. As a material alone, it is rather sombre for interiors which are generally required to be lively in appearance.

The big blocks of workers' flats built recently around the larger towns are wearing very well after a few years of being lived in. They seemed a little forbidding at first, but, with grown-up gardens and flower-edged balconies coming into the compositions, severity has given place to a pleasant simplicity. As properties, these flats seem to have improved with time. The people look unusually happy and industrious; they seem to value the open spaces, the wide roads and the bright colours painted on the buildings. Bright colour, indeed, is the prominent feature. Travelling across Germany, one sees it constantly, applied in broad patches on large façades. A five-story wing of some new flats near Berlin is coloured from eaves to plinth with a bright mauve. The main front of the same block is steadier with an ochre wall, but the details are coloured—red down pipes, doorways of black, blue, white and brown, and windows with yellow reveals, red transomes, black mullions and white frames. This sounds gaudy, but handled, as it is, with ability, the effect is most invigorating.

The balcony is the ever-persistent feature of these housing blocks, for without one a flat could not be a home to a German. Although the projecting variety affords more opportunity for architectural expression, the inset balcony, more like an open room, with its protection from wind and rain, is more valued in these days of enthusiasm for hygienic culture.

The spirit of modernism, the desire for better health, for simplicity and economy, and for a clearer outlook seems to find its best expression in new working suburbs like the one at Neukölln, composed entirely of flats.

(To be continued.)

Fig. 2.—Stucco Detail on Entrance to Flats in Leninser Strasse, Berlin. Eric Mendelssohn, Architect.

Fig. 1.—Brickwork with Mortar Joints of Dark and Light Colour Alternately, on a Cologne Building.

"THE BUILDER" DEBATE

XXXIII.—COMPETITION AWARDS.

SIR,—It is probably a defect of debating generally that the principals must take extreme sides and concede as little as possible to their opponents. It is probably for this reason that so many of the finer points in the middle zone, so to speak, of the discussion are so frequently overlooked, while the cruder arguments gain full play. Both "Positive" and "Negative" appear to have overlooked an important consideration which, to my mind, determines the debate in favour of the "Negative" view. The point in question is that as to which design is to be followed in the executed job.

All appear to agree as to the objects aimed at in promoting a competition, viz., to find a solution to the planning problem and a fine architectural design, and to find the man capable of carrying it out. I take it that even "Positive" recognises this, and that though he would give the promoters the option of withdrawing the commission from the winner of the competition, he would anticipate that promoters would obviously wish that the competition would discover at one stroke the right scheme and the right man. Does he suggest, therefore, that the promoters, who may be unwilling to entrust the responsibilities of building to the winner of the competition, must content themselves with a second-best scheme? This would surely be a sad waste of opportunity, destroying one of the chief services of the competition system adopted.

If, on the contrary, he proposes to allow the promoters to make use of the winning scheme, though entrusting its execution to a man of their choice, I do not see how he is to get over the question of copyright. This might be surmounted legally by making the concession a condition of the competition; but, morally, it would be impossible to appropriate the brainwork of a capable planner in return presumably for a premium, the amount of which, if at all according to the usual scale, would be obviously inadequate. To tack on to the conditions of competition any additional compensation for copyright would be only adding one more difficulty to discourage the promotion of open competitions.

None of these ideas will work, which is my reason for concluding that the "Negative" case has been carried. But taking the liberty of ignoring the terms of the motion, and treating this merely as an opportunity of ventilating a real grievance which promoters of competitions under R.I.B.A. control have against the code of that body, I would suggest a reform which to a large extent reconciles the points of view of the parties to this debate.

I have every sympathy for the promoter who is forced to entrust a great building scheme to an inexperienced man, and I should have every sympathy with the clear winner of a competition who had the cup knocked from his lips before he could drink. I think it a necessity that the winner should be permitted to carry out the work, but I think it also a necessity that the promoters should have the right to appoint an experienced architect to share the responsibility of it, should they doubt the abilities of the winner. I think also they should not be expected to have to pay an additional fee for this service, but the scale fees should be shared on a standard proportion between the collaborating architects. I would also make it a condition that this option should only be allowed to be exercised in cases where the winner has been less than a certain minimum time actively in the profession—a period I should set at certainly not less than eight years.

I believe that some such arrangement as this would not only maintain the confidence of competitors, but would promote a greater confidence in outside bodies to make use of the competition system as the means of obtaining the best architectural solution of the problems involved in their projects.

THINKINGCAP.

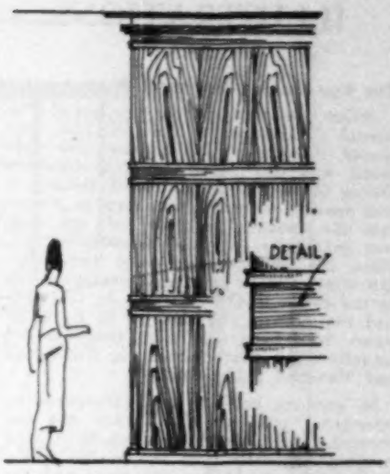


FIG. 4.—DETAIL OF WALL COVERING OF MAHOGANY LAMINATED PLYWOOD, IN A NEW GERMAN CAFÉ. (*See page* 688.)

SIR,—Reduced to simple terms "Positive's" proposal seems to be that the promoters of competitions shall not be bound by the assessor's award, but that the premiums shall, nevertheless, be distributed in accordance with it. First of all, then, why have an assessor? The great points urged in favour of the professional assessor have always been the desirability of securing the best design for the purpose in view, and the protection of the competing architects. Surely both these desirable objects would cease to be secured if "Positive's" suggestions were adopted. *Palmam qui meruit ferat*, though possibly an old-fashioned sentiment in these progressive times, is, nevertheless, a sound one. But if the appointed judge is to be superseded and the victor deprived of his laurels, what confidence can anyone have in the contest?

In the second place we have to remember that the first premium almost invariably merges with the successful competitor's fees. Would the promoters of a competition, therefore, have to provide another premium for the design placed first by the assessor, in the event of his award being over-ruled? If so, I fear that "Positive" is creating more problems than he is attempting to solve.

Let us be careful in our zeal to reform the competition system. After years of travail, public and other authorities have at last become more or less resigned to the R.I.B.A. conditions for architectural competitions. If any suggestions for reform are to be made, let them come from the other side. To make them ourselves to our own disadvantage, though rather an heroic gesture, is "asking for trouble."

COMPETITOR.

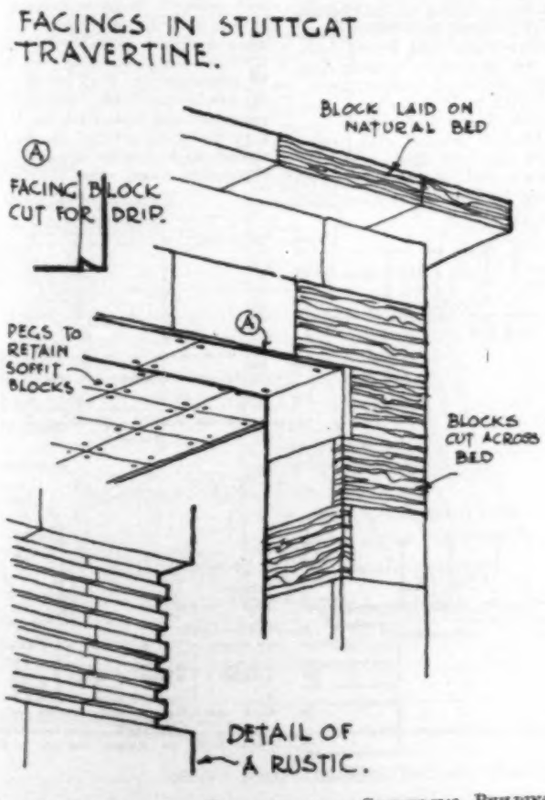

FACINGS IN STUTTGAT TRAVERTINE.
BLOCK LAID ON NATURAL BED
A
FACING BLOCK CUT FOR DRIP.
PEGS TO RETAIN SOFFIT BLOCKS
BLOCKS CUT ACROSS BED
DETAIL OF A RUSTIC.

FIG. 3.—DETAILS FROM ENTRANCE TO A COMMERCIAL BUILDING IN BERLIN. (*See page* 688.)

Indian Architects' Year Book.

We have received a copy of the Year Book of the Indian Institute of Architects (allied with the R.I.B.A.). This body came into existence in September, 1929, when the by-laws of the constitution of the Bombay Architectural Association were revised and reformed to take into account the affiliation to the R.I.B.A. and the body reconstituted under its new title. The President for the session 1930-31 is Mr. D. W. Ditchburn, F.R.I.B.A., who is supported by Mr. Burjor S. J. Aga, F.R.I.B.A., and a strong council. There are over 150 members. A number of valuable papers have been read at the various meetings, some being reprinted in the Year Book. The Institute now administers in India the examinations of the R.I.B.A. The Institute's address is 7-10, Elphinstone-circle, Bombay.

ILLUSTRATIONS

PLATES.

The New Victoria Theatre, S.W.

WHEN two years ago the directors of Provincial Cinematograph Theatres, Ltd., purchased the site of this theatre they were faced with one or two difficult decisions. Owing to the very high cost of the site it was essential to get as many seats as possible into the theatre. To attain this end there was practically only one solution, viz., to place the whole of the stalls floor below the street and to arrange the entrance hall in the depth of the balcony. At the stage end the floor of the stalls is 22 ft. below street level, and the side gangways are actually under the pavement in Wilton-road and Vauxhall Bridge-road.

In carrying out the deep excavations an interesting piece of old London was discovered. At a depth of about 14 ft. and running diagonally from end to end of the site a line of old mooring posts and the camp-sheeting of an old wharf were uncovered. On one side of the posts was a layer of black river mud showing that in earlier days a water-way (probably an arm of the Thames) extended to this point, and that barges came up to discharge their cargoes here.

Above the stalls there is a large single balcony, seating 1,100 people, extending the full width of the theatre and about 90 ft. deep from back to front. Between the stalls and balcony a large entrance hall and vestibule is formed at street level, with entrances from Wilton and Vauxhall Bridge-roads. Stairs lead from this hall upward to the balcony and downward to the stalls. The boiler house and heating and ventilating plant are placed on the roof, together with the projection-rooms, electrical workshops, etc. A fully equipped stage with ample dressing-room accommodation is formed at the southern end of the site.

Constructional points of interest are many. Having sunk the stalls beneath street level it was necessary to provide heavy concrete retaining walls, which vary from 3 to 7 ft. in thickness, on both sides of the stalls. At the stage end the adjoining building (a big drapery store) erected on four great stanchions loaded up to about 300 tons had to be underpinned as the cinema excavations went down 10 ft. lower. This proved to be an extremely delicate operation.

The entrance hall floor is suspended from the girders carrying a balcony. There are two main balcony girders, one 93 tons, the other 70 tons, and each 101 ft. long. The smaller of these was brought by rail to London from the North of England in one piece, taken through the streets in one piece to the site, and lifted straight into position. It is said that this is the biggest girder ever handled in this way. The whole building is a steel-framed structure, and the total weight of steel involved is upwards of 1,600 tons. All stanchions rest on large steel grillages filled in solid with concrete. As in two cases the point loads reach nearly 900 tons very heavy foundations have been rendered necessary. In the construction of the building a large "Gratworcus" crane on a steel tower 100 ft. high was used. The crane lifted 4 tons at a radius of 100 ft. and commanded the whole area of the site.

The drainage proved a highly complicated and difficult operation. Owing to the confined site the whole of the drainage is within the building, and in many cases the suspended floors and the drains had to be constructed together. All sewage has to be lifted by a sewage pump to the level of the sewer in the street.

The height from the floor under the stage to the roof of the stage is 94 ft. Over the centre of the auditorium is a dome 65 ft. in diameter, the steel ribs being filled in with concrete. The eye of this dome, 20 ft. dia., is glazed to admit such daylight and sunlight as is required by the London County Council during the day. At other times a steel rolling shutter excludes daylight. Immediately over the proscenium arch is a large John Compton organ. The console is placed in the orchestra and the organ is electrically operated. When an organ solo is about to be played, the organist's platform in the centre of the orchestra well is electrically elevated to stage level, giving the audience a full view of the performer.

The bulk of the fronts with their plain horizontal bands, is intended to express the idea of the single large hall, whilst the large openings and the vertical lines mark the entrance and the vestibule. The house of entertainment is suggested by the gaily coloured canopies along the fronts, limited by the L.C.C. rules to one-half the total length. There is, in the horizontal bands, an attempt to express the life and movement of the film. Over the main entrance the lines change abruptly from horizontal to vertical. The idea of the interior decorative scheme is a fairy palace under the sea.

The general contractors were Messrs. McLaughlin and Harvey Ltd., and the following were sub-contractors:—H. Young and Co., constructional steelwork; J. Jeffreys and Co., heating and ventilating; C. Isler and Co., Ltd., artesian well and pumps; F. Bradford and Co., ferro-concrete balcony and staircases; Concrete, Ltd., ferro-concrete floors; Burn Bros. (London), Ltd., plumbing and sanitary work; Stuarts Granolithic, cast stone facings and pavings; F. Braby and Co., water tanks; Frank Burkitt, fireproof curtain and counterweight system; Dennison, Kett and Co., Ltd., roller shutters; J. Gardner and Co., Ltd., ventilating louvres; Conrad Parlanti, Ltd., outside canopy and wrought metalwork; Garton and Thorne, wrought metalwork; Henry Hope and Sons, Ltd., steel sashes and stage lantern light; J. A. King and Co., Ltd., pavement lights; Self-Sentering Expanded Metal Co., Ltd., steel centering for plaster work; J. W. Gray and Son, Ltd., lightning conductor; Brunswick Engineering Co., sliding roof shutter; Fenning and Co., granite; Clarke and Vigilant Sprinklers, Ltd., sprinklers and fire hydrants; Shanks and Co., sanitary apparatus; The Chiswick Guild, wood panelling; John Bennie, Ltd., passenger lift; Morant and Miller, Ltd., glass ceiling lights; Clark and Fenn, Ltd., fibrous plaster and decorative works; Lap (C. I. Process), Ltd., modelled exterior panels; Venesta, Ltd., "Plymax" doors and wall linings; Art Marbles, Stone and Mosaic Co., marble floors; Marble Mosaic Co., Ltd., "Terrazzo" floors and wall linings; W. W. Turner, Ltd., seats and carpets; Lawford and Co., asphalt; Cement Marketing Co., cement; London Brick Co., bricks; The Standard Insulator Co., rubber flooring; F. H. Pride supplied and manufactured all decorative glass lighting fitments, reflectors for concealed lighting and interchangeable exterior signs.

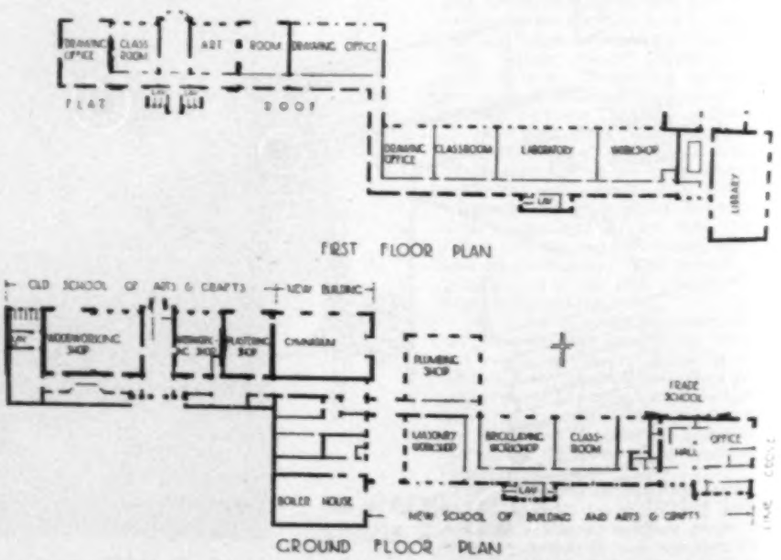
Messrs. W. E. Trent and E. Wamsley Lewis are the associated architects.

Eastbourne College War Memorial Building.

The War Memorial Building was commenced on July 4, 1923, and with the completion of the tower and south wing, the unveiling and dedication of the War Memorial was performed by Lieut.-General Sir Charles H. Harington on June 28, 1925, Mr. E. C. Arnold being then headmaster. It was not until February 28, 1929, that a contract was entered into for the erection of the rest of the building, and the north wing was formally opened by the Rt. Hon. Viscount Hailsham on Saturday, June 14, this year. This north wing is named the "Arnold" wing, as a fitting tribute to Mr. E. C. Arnold's services to Eastbourne College, both as an assistant master and headmaster from 1899 to 1929, and to whose foresight, enthusiasm and generosity the existence of these buildings is primarily due.

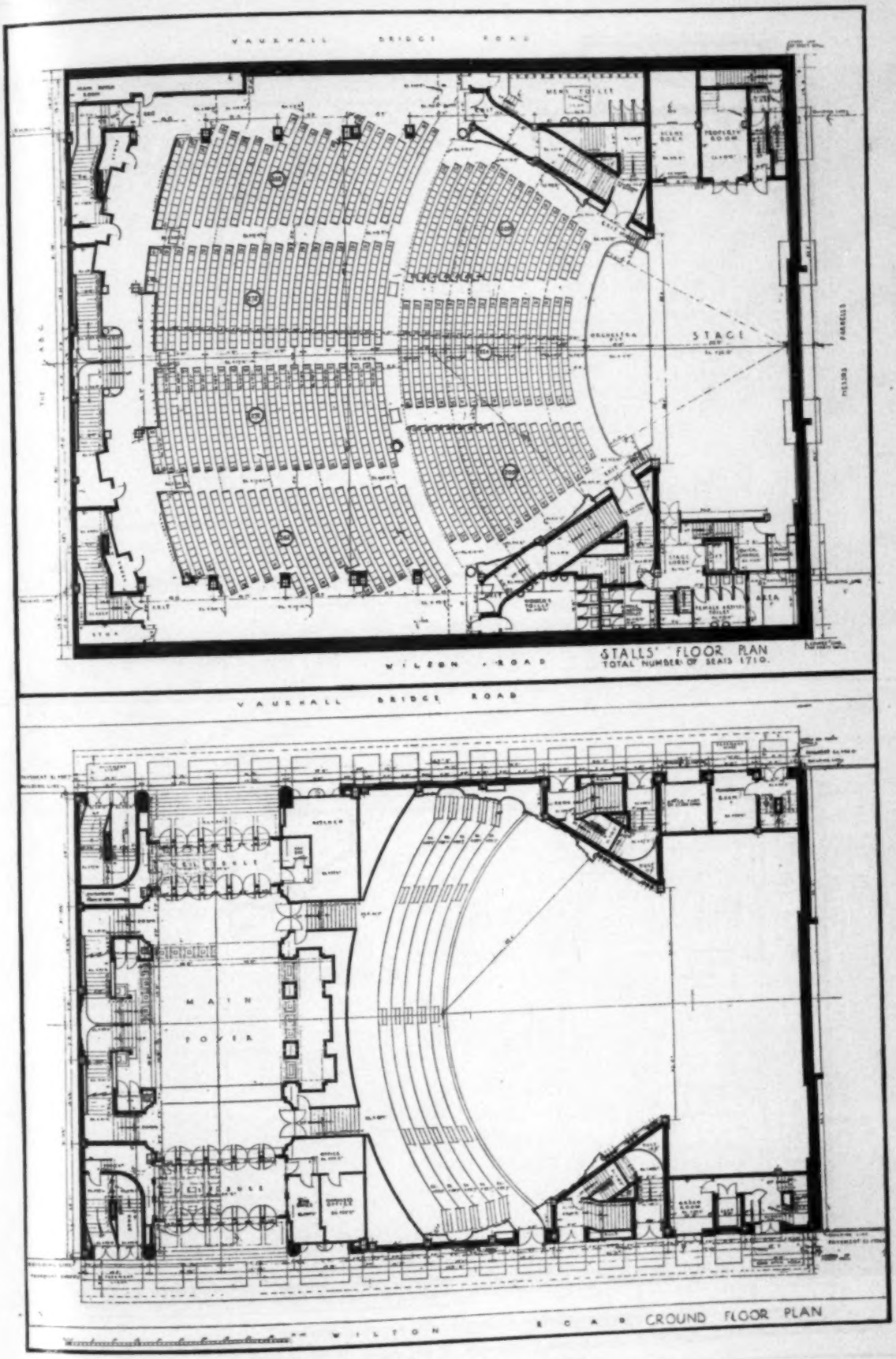
The scheme having taken from first to last some seven years to carry out, it is perhaps permissible to state briefly the problem with which the school was confronted, namely, to erect a worthy War Memorial which would at the same time form part of a larger scheme for providing further accommodation for the school and to design this in such a way that sections could be carried out from time to time as funds permitted without detriment to the design as a whole when completed. Largely on Mr. Arnold's initiative, instructions were therefore given to the architects at the end of 1921 to prepare plans for the whole scheme, and building commenced with the tower in 1923. The tower forms the central feature of the new additions, consisting of north and south wings on either side, which can be eventually linked up with the new buildings and the big school by an extension of the cloisters, which run along the whole of the buildings on the west side. This central tower from the nature of its height and size will always focus attention, and for this reason it is the War Memorial proper, having been designed so as to be the chief external architectural feature of the school buildings. It contains on the ground floor the War Memorial Hall, on the walls of which are inscribed the names of the fallen and dedicatory inscriptions; and on the upper floors the senior and junior libraries, known as the Cavendish and the Dennys respectively,

(*Continued on page* 709.)



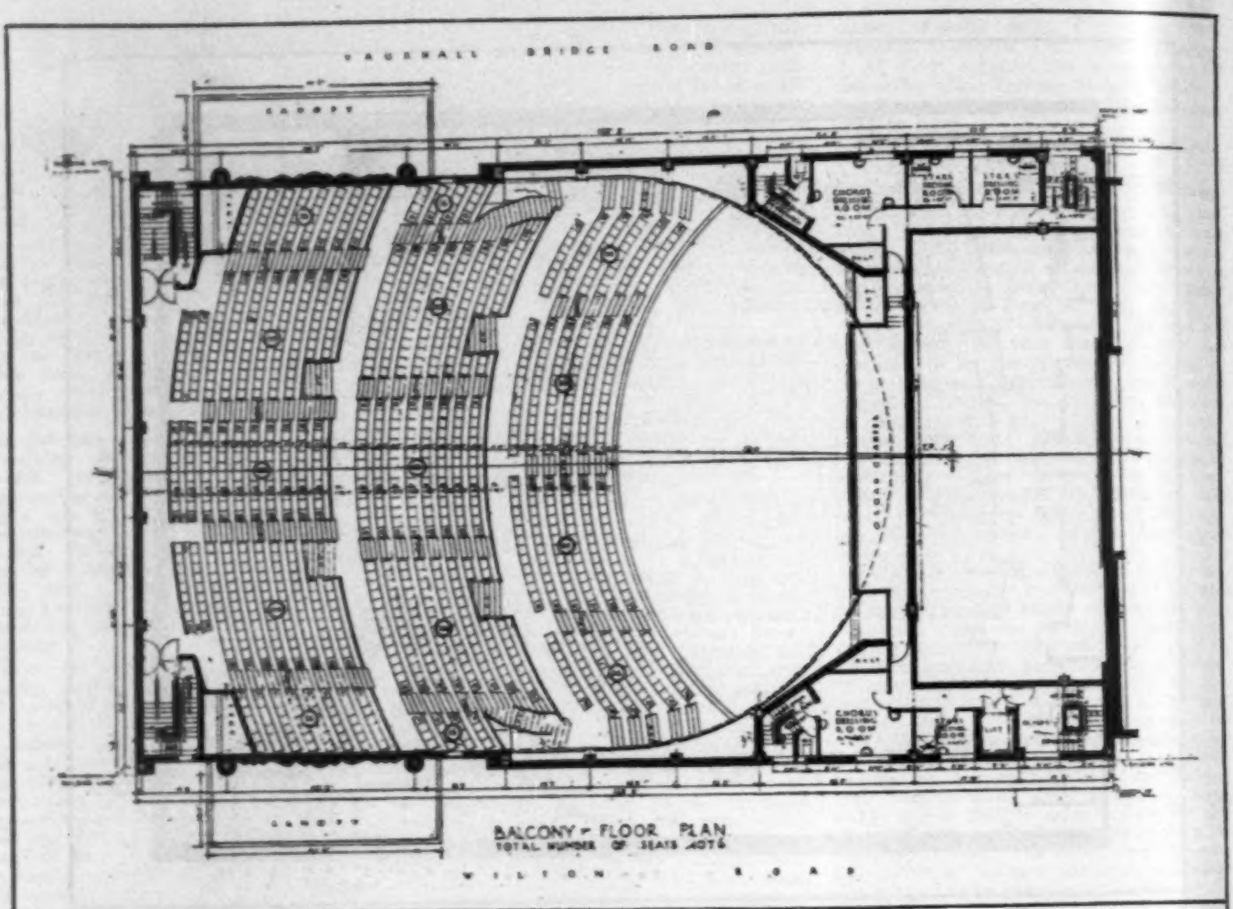
Hammersmith School of Building and Arts and Crafts, Shepherd's Bush.

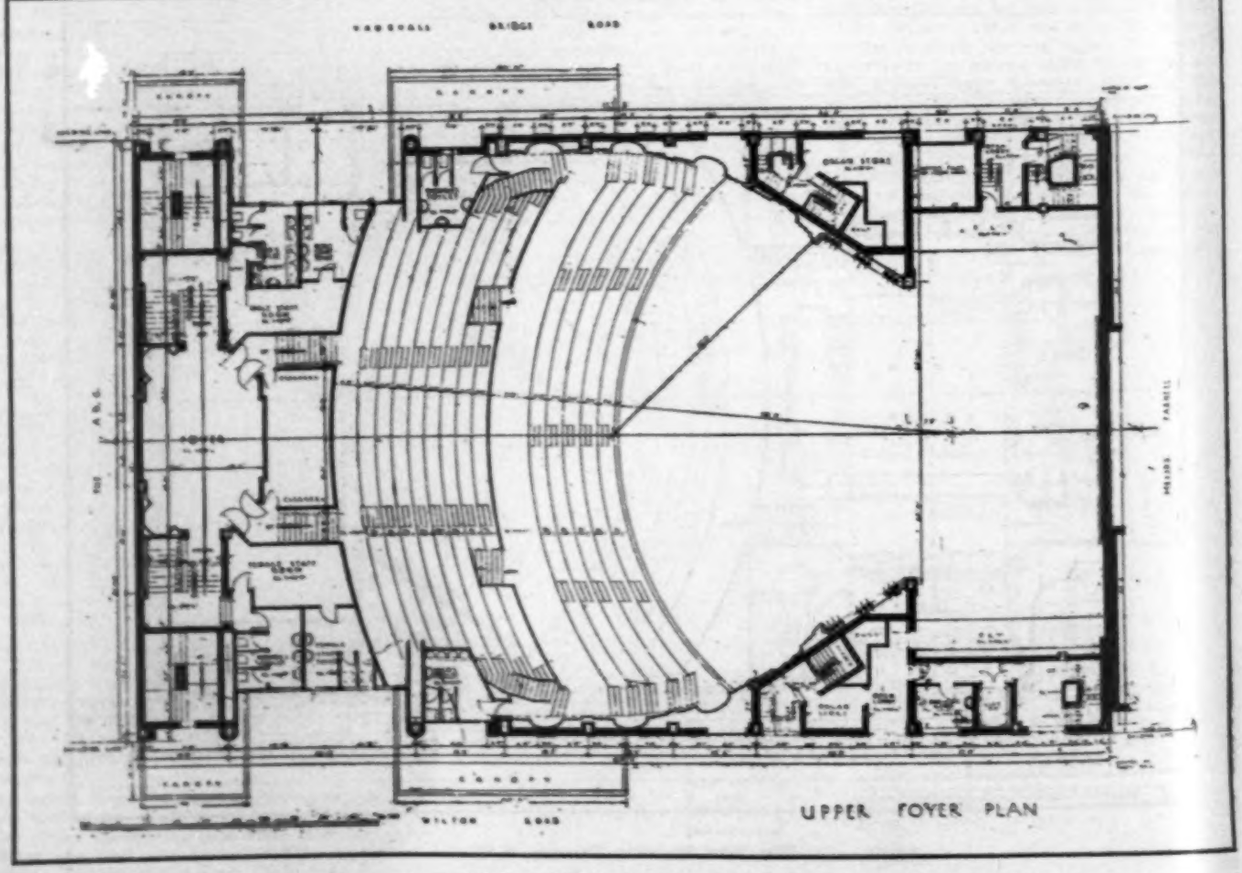
MR. G. TOPHAM FORREST, F.R.I.B.A., Architect to the L.C.C.



The New Victoria Theatre, S.W.

MESSRS. W. E. TRENT AND E. WAMSLEY LEWIS, Associated Architects.



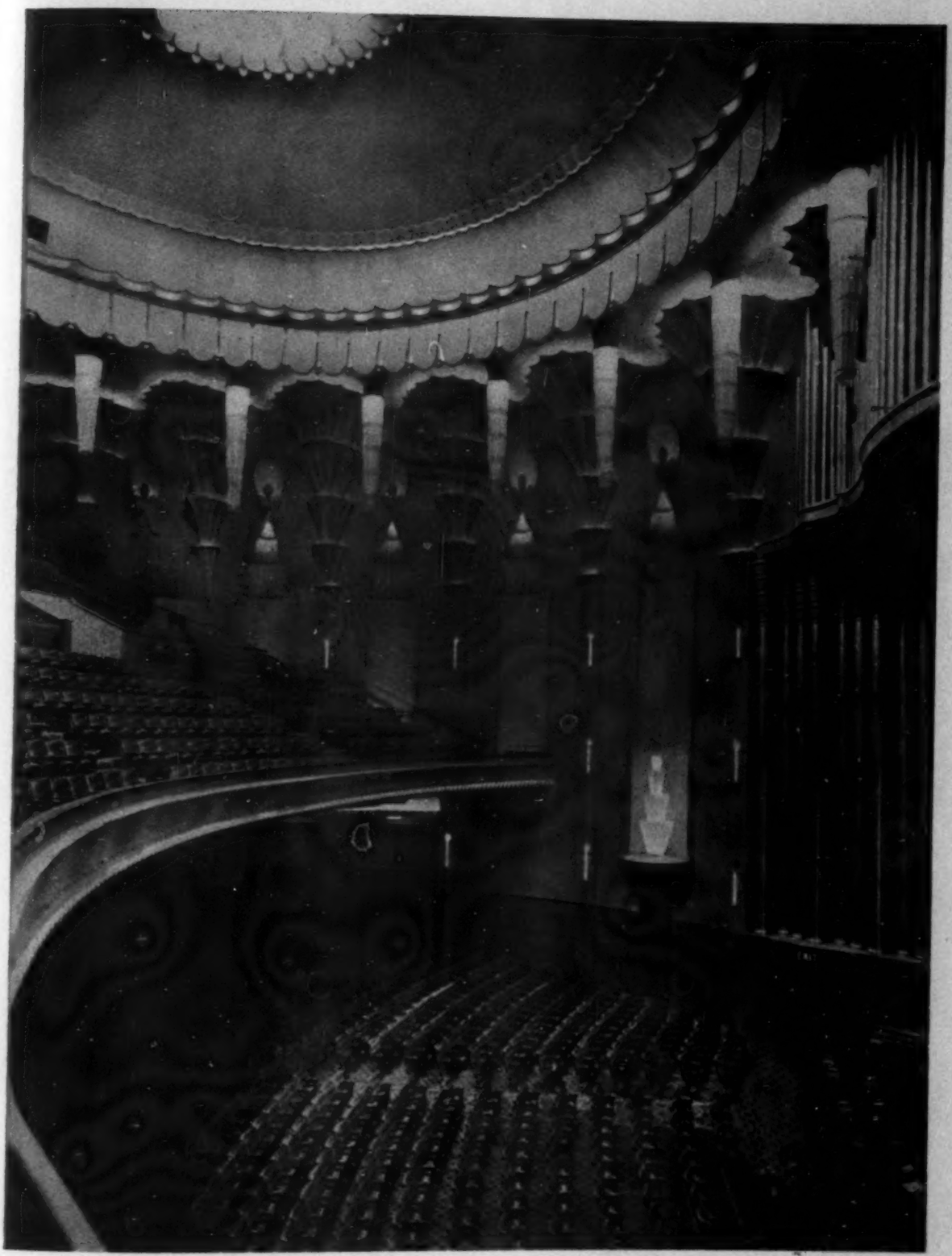


The New Victoria Theatre, S.W.

Messrs. W. E. Trent and E. Wamsley Lewis, Associated Architects.

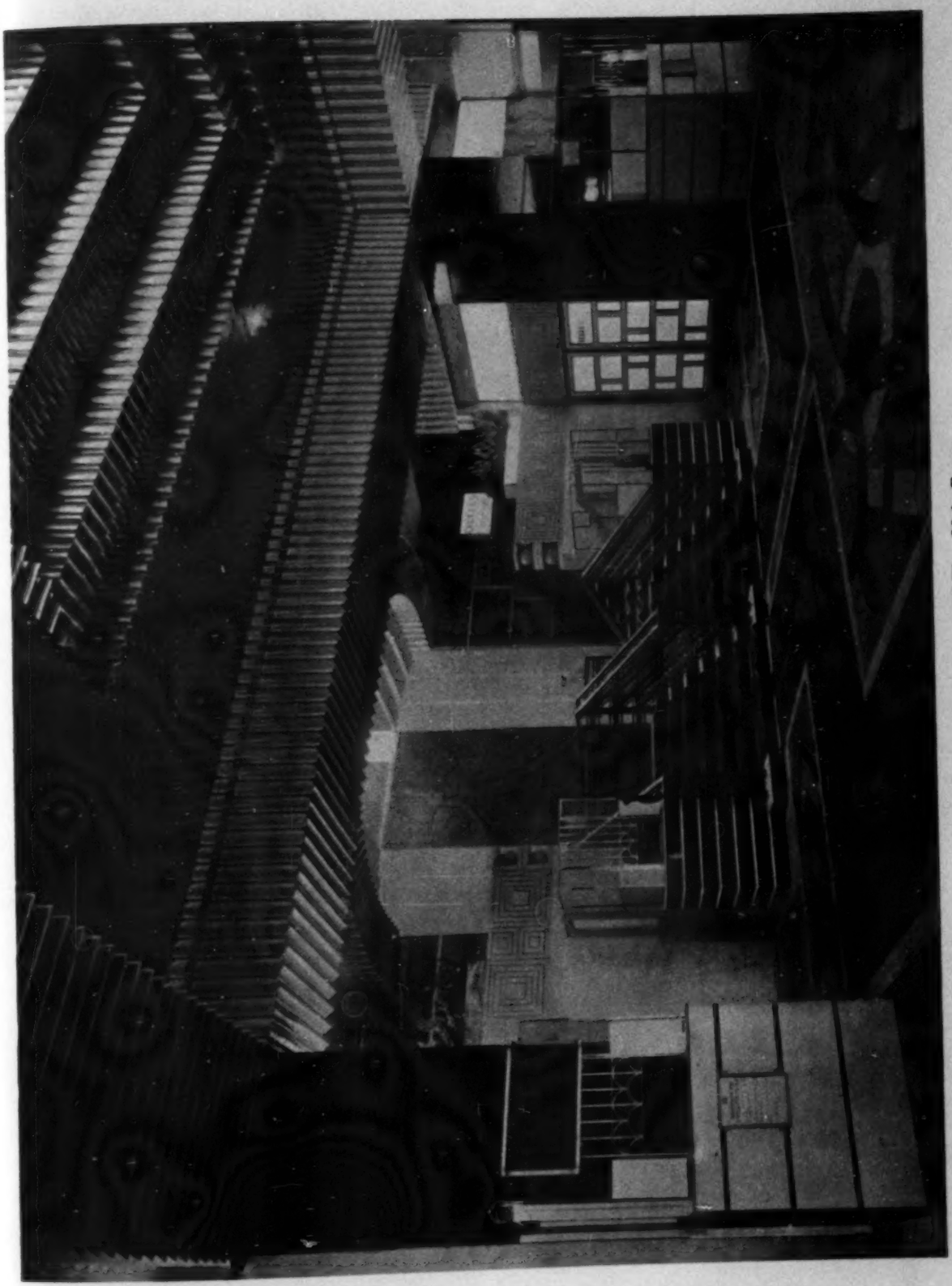
The New Victoria Theatre, S.W.: Wilton Road Frontage.

MESSRS. W. E. TRENT AND E. WAMSLEY LEWIS, Associated Architects.



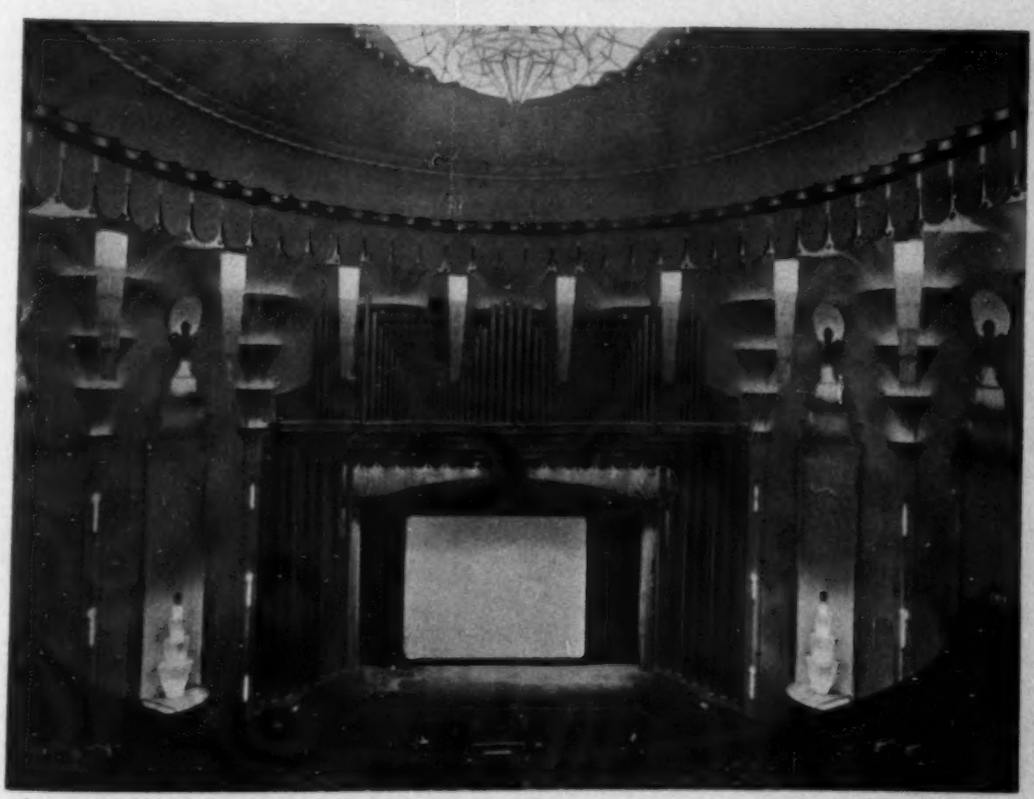
The New Victoria Theatre, S.W.: Auditorium from Circle.

MESSRS. W. E. TRENT AND E. WAMSLEY LEWIS, Associated Architects.



The New Victoria Theatre, S.W.: Main Foyer.
Messrs. W. E. Trent and E. Wamsley Lewis, Associated Architects.

VAUXHALL BRIDGE ROAD FRONTAGE.



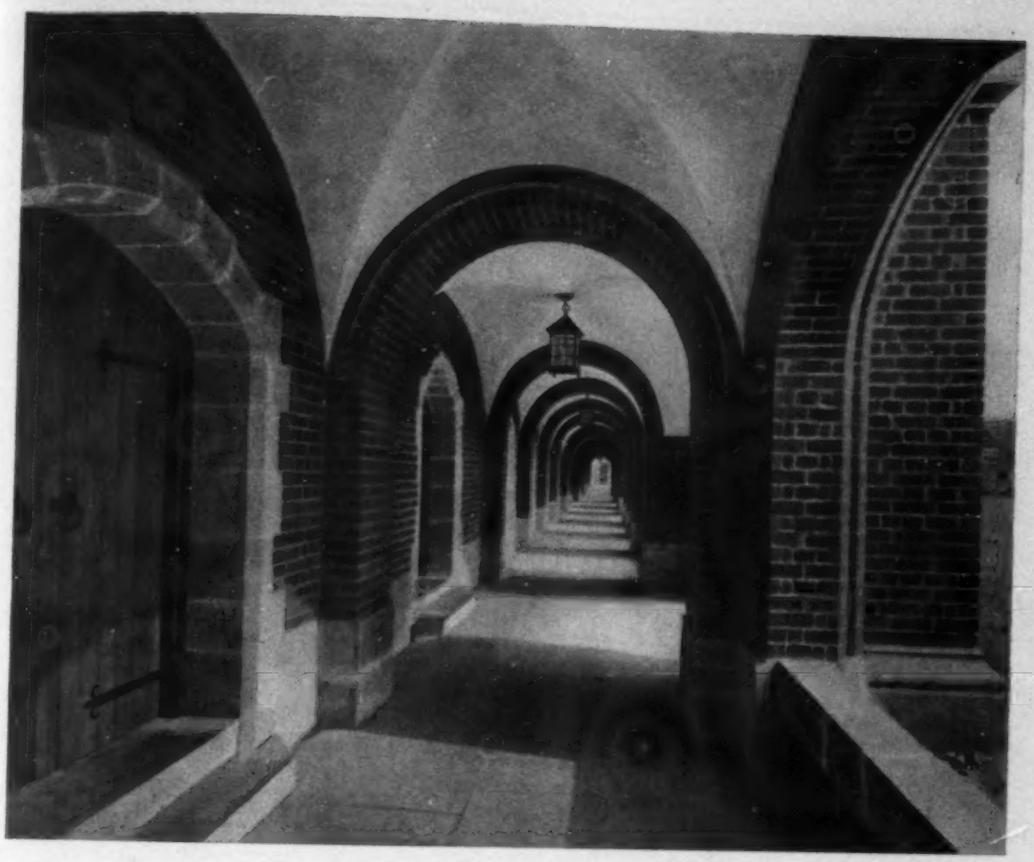
VIEW FROM CIRCLE.

The New Victoria Theatre, S.W.

MESSRS. W. E. TRENT AND E. WAMSLEY LEWIS, Associated Architects.

Eastbourne College War Memorial Building: General View from North-West.

MESSRS. SYDNEY TATCHELL AND GEOFFREY C. WILSON, FF.R.I.B.A., Architects.

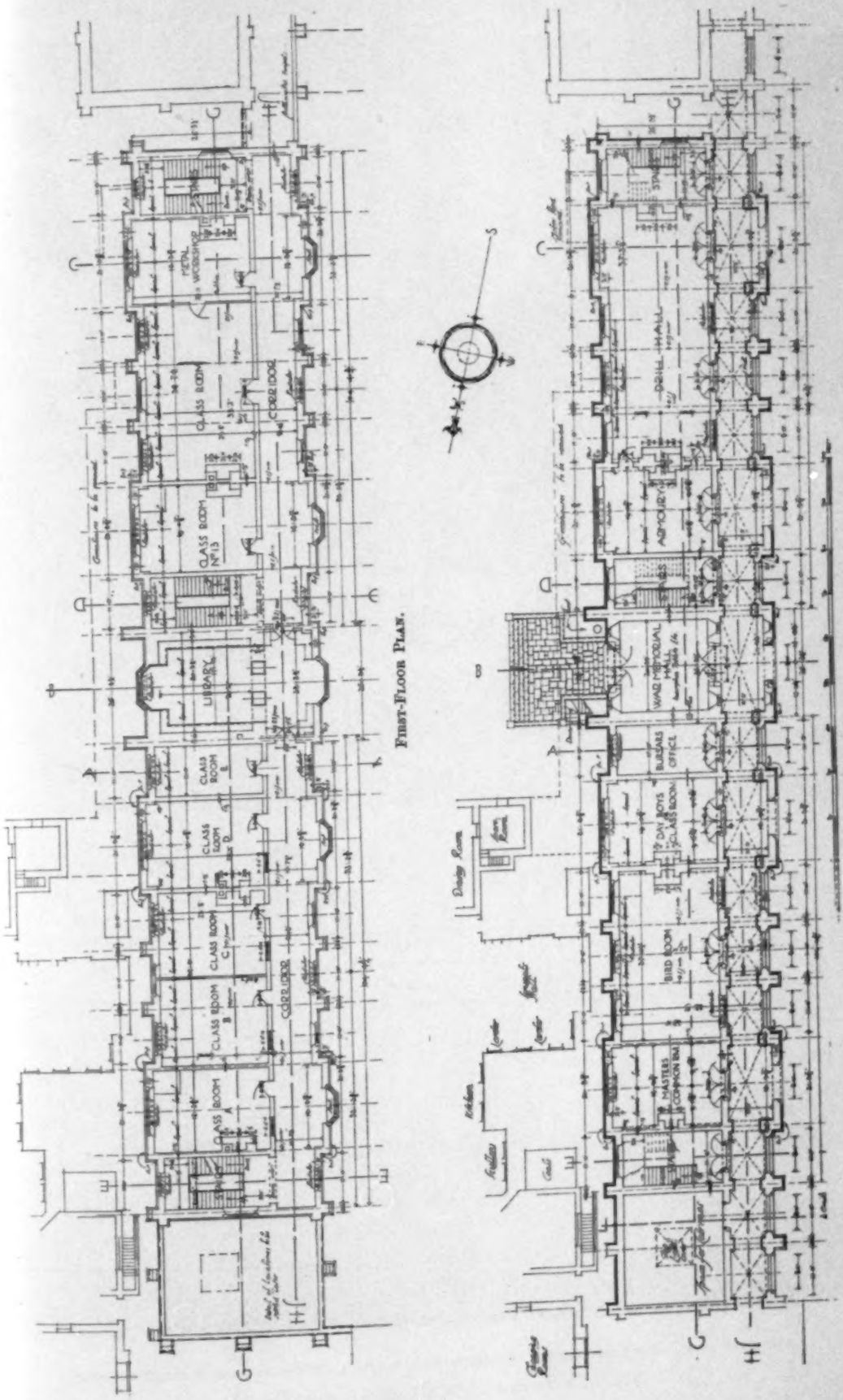


THE CLOISTERS.

WAR MEMORIAL HALL.

Eastbourne College War Memorial Building.

MESSRS. SYDNEY TATCHELL AND GEOFFREY C. WILSON, FF.R.I.B.A., Architects.



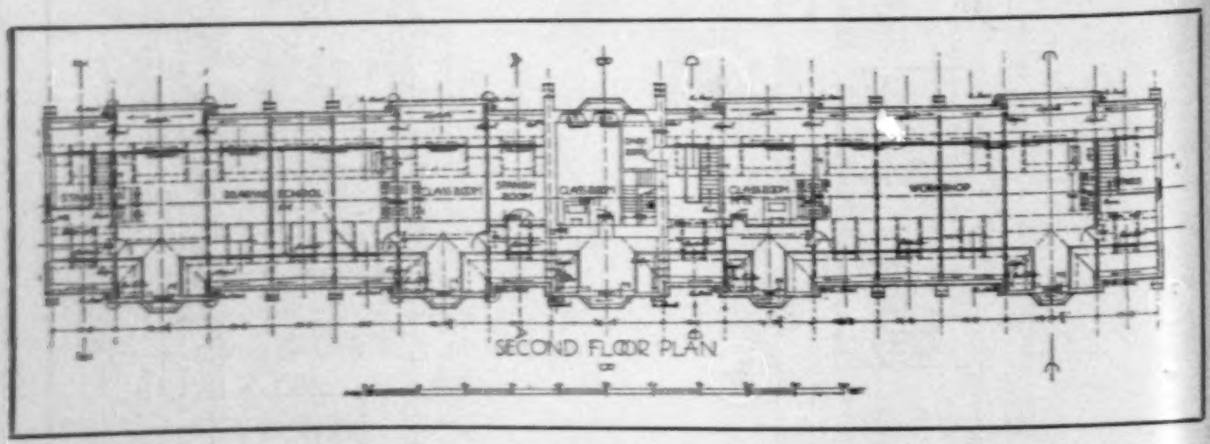
First-Floor Plan.

Ground-Floor Plan.

Eastbourne College War Memorial Building.

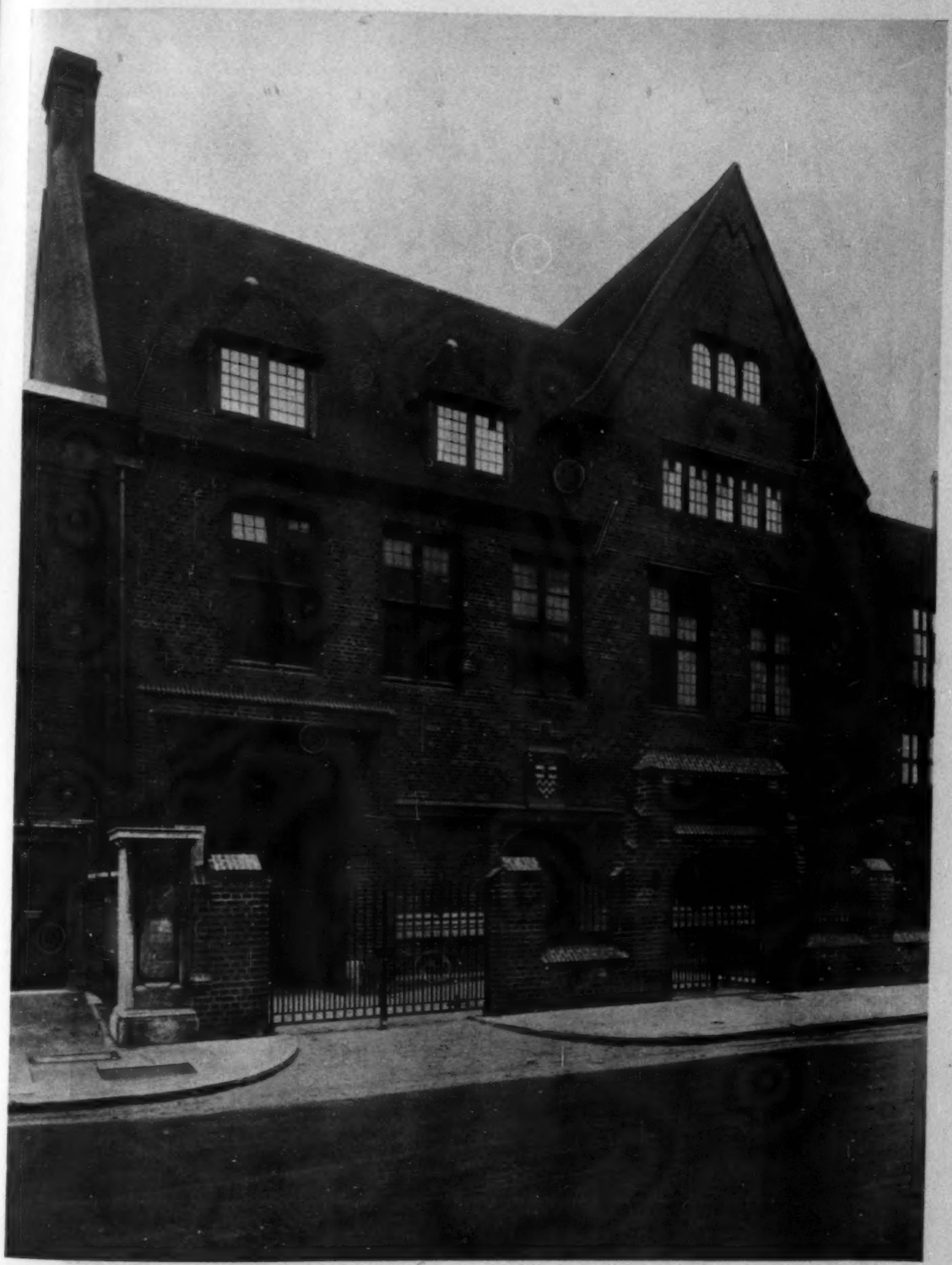
Messrs. Sydney Tatchell and Geoffrey C. Wilson, FF.R.I.B.A., Architects.

The Entrance Gates.



Eastbourne College War Memorial Building.

Messrs. Sydney Tatchell and Geoffrey C. Wilson, FF.R.I.B.A., Architects.



Hammersmith School of Building and Arts and Crafts, Shepherd's Bush: New Premises.

MR. G. TOPHAM FORREST, F.R.I.B.A., Architect to the L.C.C.

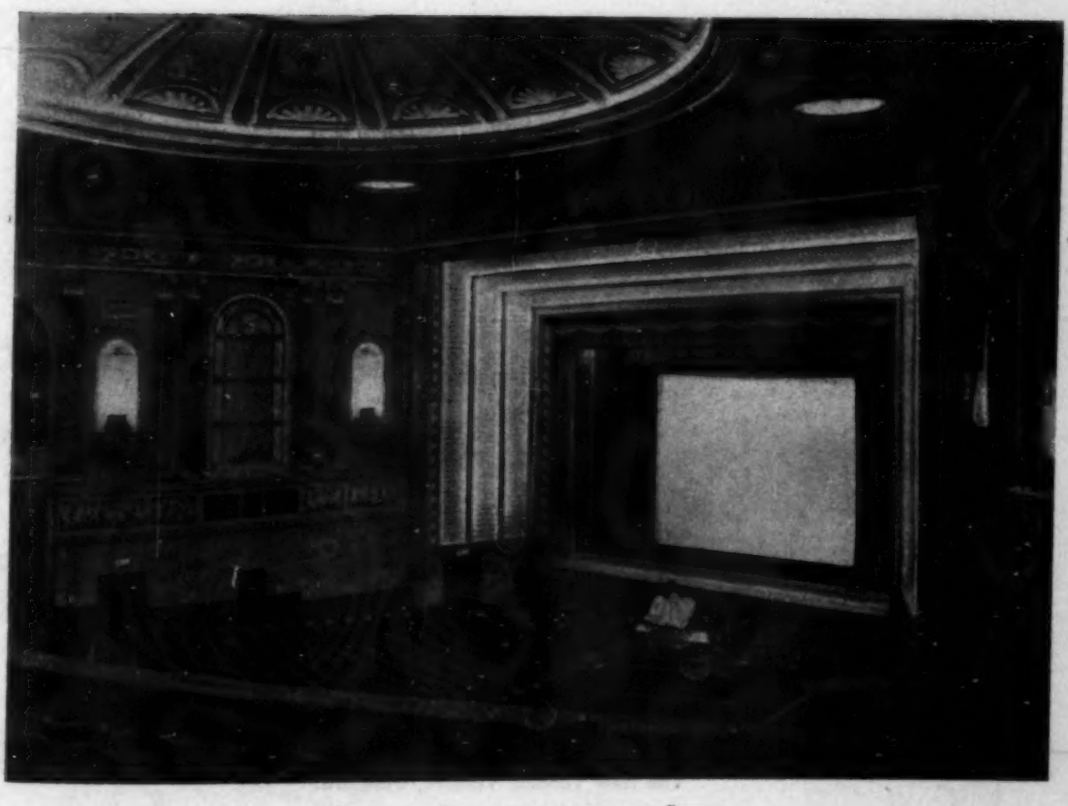
General View of Exterior.

Circle Hall.

The New Victoria Theatre, Bradford.

Mr. William Illingworth, F.R.I.B.A., Architect.

GENERAL VIEW OF AUDITORIUM.

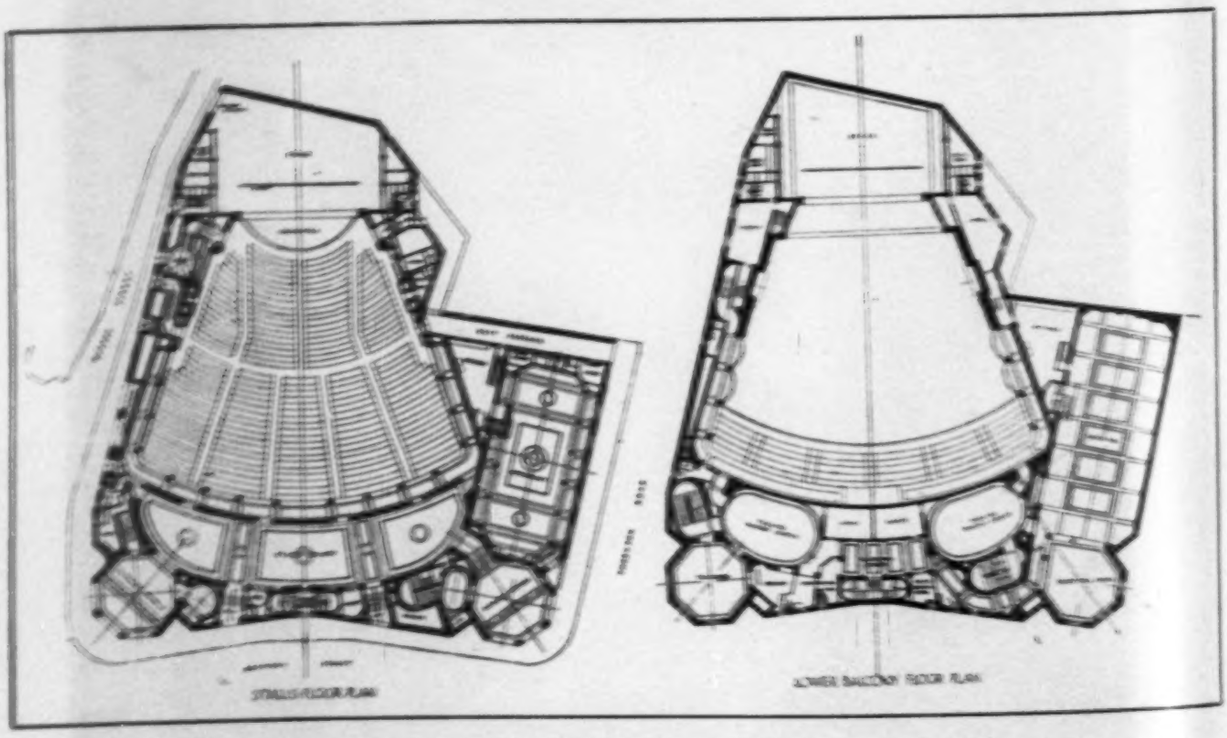


VIEW FROM CIRCLE, LOOKING TOWARDS SCREEN.

The New Victoria Theatre, Bradford.

MR. WILLIAM ILLINGWORTH, F.R.I.B.A., Architect.

Restaurant.



The New Victoria Theatre, Bradford.

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DEVELOPMENT OF THE CITY OF WASHINGTON

SIR BANISTER FLETCHER occupied the chair at a special meeting of the R.I.B.A., at Conduit-street, on Monday night, when Mr. Frank Baldwin, Secretary of the American Institute of Architects, gave a lecture, illustrated with slides, dealing with the development of the City of Washington.

That city, said the lecturer, was one of the three large cities of the world which were built upon a definite pre-ordained plan—the others being Alexandria, and St. Petersburg. The city of Washington was the outgrowth of the determination of the First American Congress to move from Philadelphia after the Revolutionary War, and the site was chosen at the confluence of the Potomac River and the Anacostia, partly in the State of Virginia and partly in Maryland, and a section 10 miles square was set apart and named the District of Columbia. Here President Washington ordered that the construction of the city should be begun. Plans were set on foot, and to a limited extent they had been followed. The original plan was called the Ellicott plan, though it was largely, perhaps chiefly, designed by Major L'Enfant, a French engineer, whom Washington brought into his service.

The main point of the plan was that it was arranged round one main axis. He had heard the opinion that it was laid out on the French idea of military defence, and that the intersecting avenues were intended to offer military opportunity for the prevention of rebellion or uprisings of any sort. On this plan the city was developed from 1792-1800, and the buildings that were erected at that time followed distinctly the plan as intended by President Washington and his secretary, Thomas Jefferson. There were practically no departures for fifteen or twenty years. Then, unfortunately, in the haste of making a great country, the ideals were lost and subsequent Presidents, notably—he could even say notoriously—President Jackson, for the next 75 years utterly disregarded the plan of the city; they built where they chose, without regard for decency and order. And there had been some tragic errors, which they were now trying to rectify.

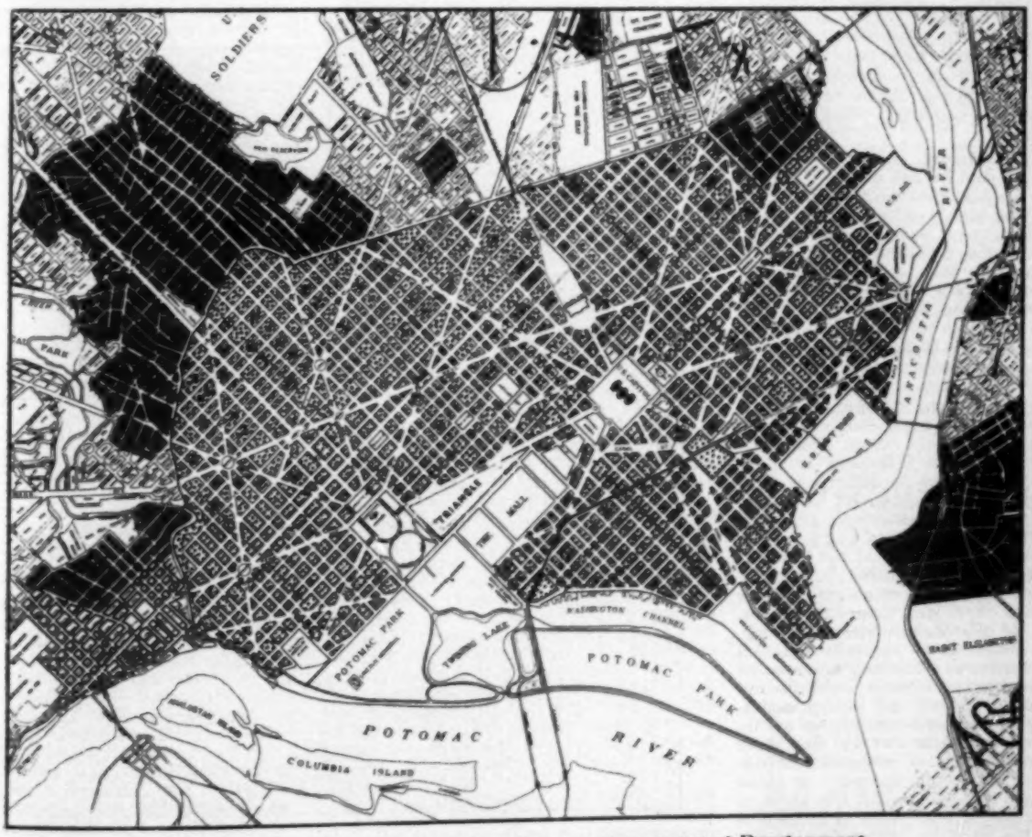
In 1900 came a new birth, a new thought. As his audience, said the speaker, would recall, in 1893 the World's Columbian Exhibition was held in Chicago, and there was the first opportunity in America for the exhibition of what could be accomplished by the collaboration of the Arts. This was the source of the inspiration, in 1900, to appoint a Commission—of which Senator James McMillan was chairman. He was a man of great executive ability, grand vision, and possessed of architectural and artistic appreciation. McMillan organised this Commission, and grouped around him the best talent—not only architectural, but landscape, painting and sculpture. Thus was created the new plan—though it was really a rebirth or crystallisation of the L'Enfant plan. From that time, 1900, the McMillan plan of Washington had been followed.

The lecturer then proceeded to show slides showing various aspects of the city, with some of its principal buildings and monuments; amongst them the Union Railway Station (which is the only railway approach that enters the city, all railways coming into that station); the Capitol (designed about 1792, by William Thornton); the Post Office Buildings; the Washington Monument; the White House (which got its name, according to the lecturer, because it was badly discoloured through fire by the British in 1814, and subsequently had to be painted white); the Pan-American Buildings, built by Andrew Carnegie, and designed by the young Frenchman, Paul Cret; the Treasury Buildings; and the Carnegie Public Library.

In returning to the planning and development of Washington in the last few years, the lecturer said that the last Congress passed two exceedingly important Bills. One was known as the Shipstead Act, and it forbade the erection, within 200 ft. of any public park or public building in the city, of a building of any kind until the design had been approved by the National Council of the Fine Arts. That was pretty far-reaching, but it would be wonderfully beneficial to the city. The other Bill granted to the Secretary of the Treasury full powers to select, at his own judgment and in his discretion, the architect for any public building, without competition and without regard to politics, if he chose to disregard them. The present Secretary, Mr. Mellon, was a very strong and astute man. He had surrounded himself with a group of the ablest architects in the country, and they began to study the immediate needs of the city as far as the Federal Group of buildings was concerned, and began to work in collaboration. These were to be placed upon a "triangle" at present occupied by poor buildings and bounded by Pennsylvania-avenue and the Mall.

[This "triangle" is indicated upon the accompanying plan.—ED.]

When he asked them, said the lecturer, to think of the plan, he wanted them to



Lay-out plan of Washington, showing successive stages of Development.
(See Legend above.)

realise that it was not a dream; even if it was not an actuality at the moment, it was under way. He did not wish to attempt to measure the importance of the movement in money standards, but it might interest them to know that there had already been expended in the purchase of property—and an appropriations for certain buildings an $1—$50,000,000, and that only started the project.

In conclusion, the speaker referred to the fact that in 1915 they hoped to welcome all the architectural societies of the world in Washington at the International Congress. He would ask all those who had been to America and knew its problems to help make that Congress a great success.

Discussion.

The President, in asking Mr. Raymond Unwin to move a vote of thanks, said that he felt sure all would try to be present on the occasion of the Washington Congress, because he felt that would be a most interesting event.

Mr. Raymond Unwin said that in Washington they saw a city which was planned from the beginning, which was laid out upon a magnificent scale, which took quite a long time to grow up to anything like the scale on which it was laid out, but now had grown to a stature adequate to adorn that scale. It was a triumphant example of the advantage of planning even when planning took place at a period when misery could invade the enormous changes in the character of city life and city traffic and city buildings which were going to take place. He thought it was a triumphant example of the truth that any plan was better than no plan. In England we were sent to quite different conditions, particularly in London. We were sent to handling great cities packed with mistakes. If we in England were to show equal reverence for all our past buildings, we should have some difficulty in reconstructing into, say, London, any of the features of the noble of magnificence that Washington provided. While, therefore, we were mainly stimulated and helped by the example of what could be done by planning, with long and large views, when we did plan we should not try to copy, in our devious streets of London, those vast avenues and vistas which we were glad to admire.

Mr. E. V. Lucas, seconding the vote of thanks, said that he had always regarded Washington as the handsome daughter of a French father and American mother. The French father gave a lively pattern of decorations, and the American mother contributed the gridiron that civilised them. He was pleased to see the effort mainly directed towards the elimination of those discordances.

Professor Ernest Wilby (Professor of Architecture, University of Michigan) also spoke.

Mr. Balfour replied briefly, and proceedings then terminated.

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It is seldom that one can say of an architectural book that it is a pleasure to read it for its literary qualities, but Mr. Kimball has here given us the exception, a book that can be read with profit and pleasure from beginning to end. Illustrating his way with excellent photographs, he carries us along the track of American architecture from the earliest English vagrants to the most up-to-date skyscrapers. In an analysis of eighteenth-century influences he shows that the absence of any body of professional architects was counterbalanced by a continuous influx of architectural books when architecture formed part of the education and interest of the gentlemen. Its fall from this position of pre-eminence as a cultural subject, due mainly to industrialism, was probably the most staggering shock ever inflicted upon architecture, from which we have by no means recovered. Recent American history carries us from one prodigious creation to another, and we are appalled at the competitive rush for height in steel-framed buildings. One of our best-known European architects said of the steel frame that it represents the end of architecture. The author frames the reader's thought when he says: "Even at times the evolution outruns its own causes and advantages; its protagonists are aghast at the final result. Already the dissolution are apparent, and limiting forces begin to operate. It has been none too soon." These monsters, with all their beauty of form, are capable of turning upon those who made them.

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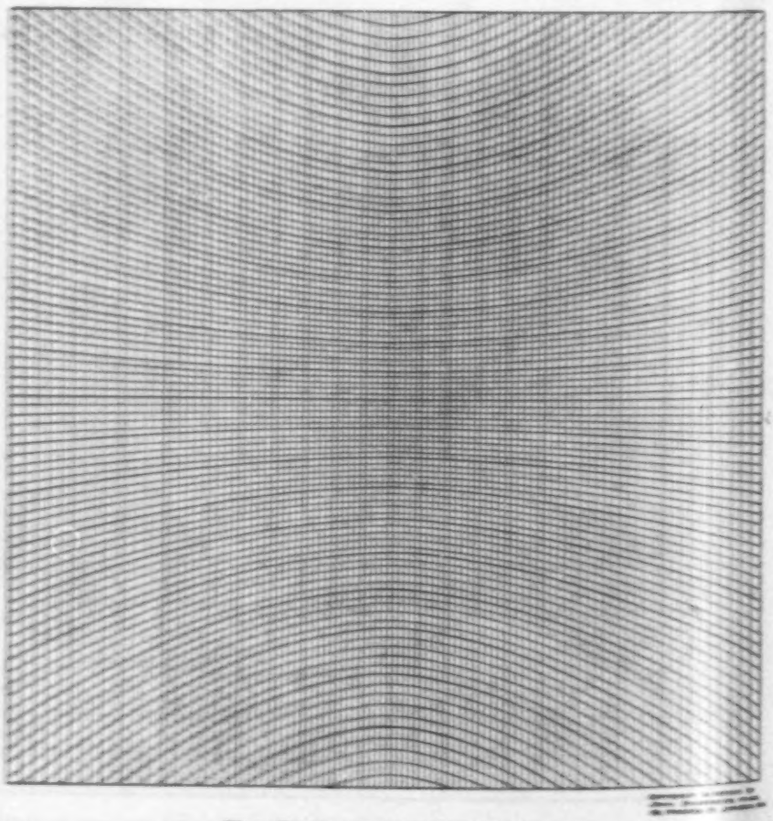

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STEEL STRUCTURES CONFERENCE

A CONFERENCE on steel structures research, to discuss the need for a national code for the building industry, was held last week, under the auspices of the Department of Scientific and Industrial Research, at the Institution of Civil Engineers. Most of the professional and trade organisations concerned in the use of steel and all branches of the building industry were represented, and messages of support were delivered from the Ministry of Health, the Home Office, the Colonial Office, various of the Colonies and Dominions, the Royal Institute of British Architects, the Association of Municipal Corporations, the Urban District Councils' Association, Rural District Councils' Association, the London County Council, and various of the leading provincial cities.

In opening the Conference, Sir Clement Hindley, K.C.I.E., the Chairman, said that the primary object of the Conference was to bring the work of the Steel Structures Research Committee to the notice of those authorities who had statutory control over building operations in this country and in other countries of the Empire. The Committee, in its membership, comprised distinguished engineers and designers nominated by the Institution of Civil Engineers, technical representatives of the manufacturers nominated by the British Steelwork Association, and other engineers and designers appointed by the Department of Scientific and Industrial Research, including the Architect to the London County Council. It must be remembered that building regulations and their application had a very important bearing and influence on the work of the designer and the manufacturer. Practice in design and construction which might have the sanction of accurate scientific knowledge might not be admissible under existing regulations and the routine application of those regulations. Whether from the point of view of the user of the building, who had to foot the bill, the designer who wished to give the user the best value for his money, or the manufacturer who wished to see his product used to the best advantage, or, again, from the point of view of the authority who was concerned primarily with stability and safety, it was obvious that the interests of all would be best served by using the most effective methods that could be devised by modern scientific knowledge. For this reason the Committee had decided to issue as soon as was practically possible an interim Report, in which they would formulate a suggested code of practice in the design of steel structures based on the present state of scientific knowledge and practical experience. As the work of research and investigation proceeded it was hoped that the results obtained by the Committee would be incorporated from time to time in this code and thus become available in practice. What the Committee was aiming at was contained in the expression, "Progressive standardisation as a continuous process."

The following resolution was then moved by Mr. David Anderson (Institution of Civil Engineers):—Whereas this Conference has heard with great interest of the work of the Steel Structures Research Committee of the Department of Scientific and Industrial Research, and has been glad to be informed by the Ministry of Health of the facts in relation to the public control of building in England, Wales and Scotland, and has noted the aims of the British Steelwork Association, and the position of the British Engineering Standards Association, the Conference hereby resolves that it will be most valuable to have a standard practice for the employment of structural steel in building, and trusts that all bodies concerned will take steps to ensure that the results of the work of the Steel Structures Research Committee are effectively applied as they accrue.

The motion was seconded by Mr. Wm. Turner MacLellan, C.B.E. (president of the British Steelwork Association) who said that the building industry was, next to agriculture, one of the principal industries in the country and exerted a wide influence on other industries, and with the advance of building science, possibilities of employment were immense. The advance of building construction had brought new factors into consideration of a highly technical nature. We had entered on a new era of constructional technique in steel, and to get the full advantages of this required adaptability beyond our previous conceptions. He hoped this work would provide local authorities with the best available scientific backing, and assist them in problems which demanded the use of the best technical resources of the country and at the same time be of assistance, not only to public bodies, but to all engaged in the building trade. The standard code of steel work practice had already its parallel in the case of bridges, which could be designed with uniformity by the British Engineering Standards Association and the Ministry of Transport loading regulations, and a steel frame building was really only a vertical aspect of the bridge problem.

The steel industry welcomed the presence of Empire representatives. Canada, he understood, had had a standard code of steel frame practice since 1923. As the whole family of the Empire had met in conference, the steel industry felt that the question of co-operation in research and standards was one of great promise. Trade could be made more fluid by Empire standards, and his Association commended this to the serious consideration of the Imperial Conference.

Mr. A. N. C. Shelley, of the Ministry of Health, said the Minister of Health was considering how far the results of the conference could be applied, while at the same time retaining the fullest possible local freedom in by-laws.

Mr. G. M. Burt (Institute of Builders) said that the Institute and the National Federation of Building Trades Employers were very glad to be represented at that important conference. They would appreciate that neither the Institute of Builders nor the National Federation had had much opportunity of discussing this matter in any detail. Before they could definitely pledge themselves to support it, it must naturally be placed before their members, but they were very interested in the whole question. The composition of the Steel Structures Research Committee was a sufficient guarantee of its technical competence, and he could assure them both the Institute of Builders and the National Federation were keenly alive to the need of the work which was to be undertaken by this committee, and they very much hoped that the movement would lead to simplification of building processes and the reduction of costs. The speaker pointed out that the work of this committee or of any other committee must be entirely wasted, or practically wasted, until they got a revision of the building by-laws and revision in their administration. There was one small addition that he would like to see to the resolution. The Steel Structures Research Committee was a new committee, and it had a new name. It was primarily, and it was quite clearly stated that it was, a research committee, and he would like to suggest that the most effective way of putting its findings before the public, and for the results of research work to have the most effect, would be for its results to be sent to the British Engineering Standards Association so that those results could have the consideration of the whole industry and be brought into line with standard practice, or perhaps he should say standard practice brought into line with the findings of the committee.

Mr. Topham Forrest, F.R.I.B.A. (Chief Architect to the L.C.C.), said that he had been authorised to attend the Conference as a representative of the London County Council. The Conference would appreciate, he felt sure, that by reason of his position as Superintendent Officer of Metropolitan Buildings under the London Building Act, he was precluded from expressing any views which might affect the future administration of that Act. He had no hesitation, however, in saying that the Council was in complete sympathy with any and every endeavour to secure greater simplicity and economy in steel construction. The London County Council could, he thought, claim to be the pioneers as regarded the erection of steel frame buildings. The Act of 1909, which was promoted by the Council for the relaxation of the Building Act in order to allow such use and construction in London, was the first code of its kind in this country. The value of this code was demonstrated by its adoption as a standard of practice in other cities. The Council was aware of the disadvantages of complete rigidity in such a code, and for this reason asked the sanction of Parliament to waive and modify certain provisions of the code, and this power was enacted in the Act of 1909. He thought it was obvious that occasions must arise in the construction of buildings when it would be necessary or desirable to deviate in some respects from strict compliance with any code. The Council's experience showed that their authority to waive or modify was so useful that Parliamentary sanction was obtained in 1923 to an extension of the power to other provisions of the Act of 1909. These Acts had now been consolidated with others in the London Building Act of 1930. This came into operation on the first of the present month, and should be more accessible and of considerable service to architects and builders in London. The work of consolidation had facilitated that, and in this respect the Act of 1909 would now come under the review of other provisions in the Building Act. The needs of the present and indications as to the trend of future development for constructional work in steel buildings were great, and, moreover, there was pressing necessity for uniform basis and practice in the fabrication and designing of structural steelwork as regarded the conditions as to stability, strength and stiffness both for the building as a whole and for its component structural members. The London County Council fully recognised the urgent necessity of such a basis and standard of practice. In investigation of designs submitted for the approval of the Council under the London Building Act the need for a uniform standard was demonstrated frequently, not less from the point of view of economy than from that of safety. So long as there existed several conflicting bases for designing, so long would it remain impossible to reap the full advantages which such methods of construction afford. The Steel Structures Research Committee had been established for the purpose of examining thoroughly the various methods and bases of designing at present in use. It had also been established for the purpose of examining evidence taken from a large volume of research during this and recent years. This examination was with the view of formulating a single basis for designing which, it was hoped, might prove applicable to structural steelwork for buildings and acceptable to designers throughout the Empire. The report of the Steel Structures Research Committee would be of great assistance to the Council in considering an amendment of the London Building Act. The conclusions of this Committee would be considered most carefully with a view to recommending their incorporation where practicable with other amendments of the Act. He could think of no document which would be of greater value to the Council nor one which would receive more serious consideration than the report of the Steel Structures Research Committee, or be of greater value in connection with the task of amending the Building Laws of London.

Other speakers included Dr. H. M. Tory (Research Council of Canada), Mr. J. Davies (representing High Commissioner for Australia), Dr. Marsden (New Zealand Department of Scientific and Industrial Research), Mr. W. A. Day (South African State Rail-

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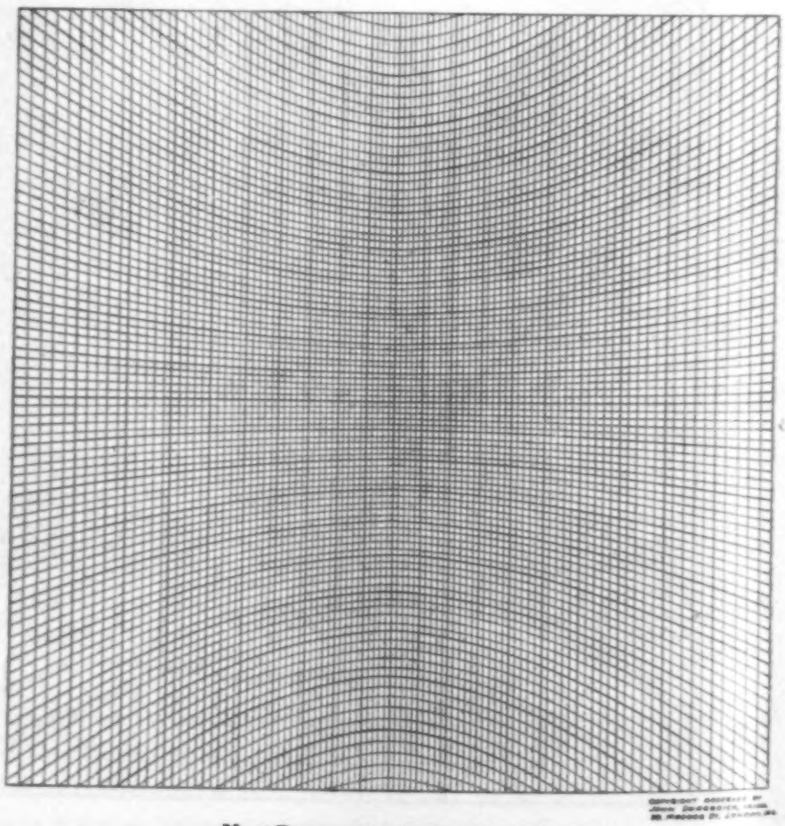

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The motion was seconded by Mr. Wm. Turner MacLellan, C.B.E. (president of the British Steelwork Association) who said that the building industry was, next to agriculture, one of the principal industries in the country and exerted a wide influence on other industries, and with the advance of building science, possibilities of employment were immense. The advance of building construction had brought new factors into consideration of a highly technical nature. We had entered on a new era of constructional technique in steel, and to get the full advantages of this required adaptability beyond our previous conceptions. He hoped this work would provide local authorities with the best available scientific backing, and assist them in problems which demanded the use of the best technical resources of the country and at the same time be of assistance, not only to public bodies, but to all engaged in the building trade. The standard code of steel work practice had already its parallel in the case of bridges, which could be designed with uniformity by the British Engineering Standards Association and the Ministry of Transport loading regulations, and a steel frame building was really only a vertical aspect of the bridge problem.

The steel industry welcomed the presence of Empire representatives. Canada, he understood, had had a standard code of steel frame practice since 1923. As the whole family of the Empire had met in conference, the steel industry felt that the question of co-operation in research and standards was one of great promise. Trade could be made more fluid by Empire standards, and his Association commended this to the serious consideration of the Imperial Conference.

Mr. A. N. C. Shelley, of the Ministry of Health, said the Minister of Health was considering how far the results of the conference could be applied, while at the same time retaining the fullest possible local freedom in by-laws.

Mr. G. M. Burt (Institute of Builders) said that the Institute and the National Federation of Building Trades Employers were very glad to be represented at that important conference. They would appreciate that neither the Institute of Builders nor the National Federation had had much opportunity of discussing this matter in any detail. Before they could definitely pledge themselves to support it, it must naturally be placed before their members, but they were very interested in the whole question. The composition of the Steel Structures Research Committee was a sufficient guarantee of its technical competence, and he could assure them both the Institute of Builders and the National Federation were keenly alive to the need of the work which was to be undertaken by this committee, and they very much hoped that the movement would lead to simplification of building processes and the reduction of costs. The speaker pointed out that the work of this committee or of any other committee must be entirely wasted, or practically wasted, until they got a revision of the building by-laws and revision in their administration. There was one small addition that he would like to see to the resolution. The Steel Structures Research Committee was a new committee, and it had a new name. It was primarily, and it was quite clearly stated that it was, a research committee, and he would like to suggest that the most effective way of putting its findings before the public, and for the results of research work to have the most effect, would be for its results to be sent to the British Engineering Standards Association so that those results could have the consideration of the whole industry and be brought into line with standard practice, or perhaps he should say standard practice brought into line with the findings of the committee.

Mr. Topham Forrest, F.R.I.B.A. (Chief Architect to the L.C.C.), said that he had been authorised to attend the Conference as a representative of the London County Council. The Conference would appreciate, he felt sure, that by reason of his position as Superintendent Officer of Metropolitan Buildings under the London Building Act, he was precluded from expressing any views which might affect the future administration of that Act. He had no hesitation, however, in saying that the Council was in complete sympathy with any and every endeavour to secure greater simplicity and economy in steel construction. The London County Council could, he thought, claim to be the pioneers as regarded the erection of steel frame buildings. The Act of 1909, which was promoted by the Council for the relaxation of the Building Act in order to allow such use and construction in London, was the first code of its kind in this country. The value of this code was demonstrated by its adoption as a standard of practice in other cities. The Council was aware of the disadvantages of complete rigidity in such a code, and for this reason asked the sanction of Parliament to waive and modify certain provisions of the code, and this power was enacted in the Act of 1909. He thought it was obvious that occasions must arise in the construction of buildings when it would be necessary or desirable to deviate in some respects from strict compliance with any code. The Council's experience showed that their authority to waive or modify was so useful that Parliamentary sanction was obtained in 1923 to an extension of the power to other provisions of the Act of 1909. These Acts had now been consolidated with others in the London Building Act of 1930. This came into operation on the first of the present month, and should be more accessible and of considerable service to architects and builders in London. The work of consolidation had facilitated that, and in this respect the Act of 1909 would now come under the review of other provisions in the Building Act. The needs of the present and indications as to the trend of future development for constructional work in steel buildings were great, and, moreover, there was pressing necessity for uniform basis and practice in the fabrication and designing of structural steelwork as regarded the conditions as to stability, strength and stiffness both for the building as a whole and for its component structural members. The London County Council fully recognised the urgent necessity of such a basis and standard of practice. In investigation of designs submitted for the approval of the Council under the London Building Act the need for a uniform standard was demonstrated frequently, not less from the point of view of economy than from that of safety. So long as there existed several conflicting bases for designing, so long would it remain impossible to reap the full advantages which such methods of construction afford. The Steel Structures Research Committee had been established for the purpose of examining thoroughly the various methods and bases of designing at present in use. It had also been established for the purpose of examining evidence taken from a large volume of research during this and recent years. This examination was with the view of formulating a single basis for designing which, it was hoped, might prove applicable to structural steelwork for buildings and acceptable to designers throughout the Empire. The report of the Steel Structures Research Committee would be of great assistance to the Council in considering an amendment of the London Building Act. The conclusions of this Committee would be considered most carefully with a view to recommending their incorporation where practicable with other amendments of the Act. He could think of no document which would be of greater value to the Council nor one which would receive more serious consideration than the report of the Steel Structures Research Committee, or be of greater value in connection with the task of amending the Building Laws of London.

Other speakers included Dr. H. M. Tory (Research Council of Canada), Mr. J. Davies (representing High Commissioner for Australia), Dr. Marsden (New Zealand Department of Scientific and Industrial Research), Mr. W. A. Day (South African State Rail-

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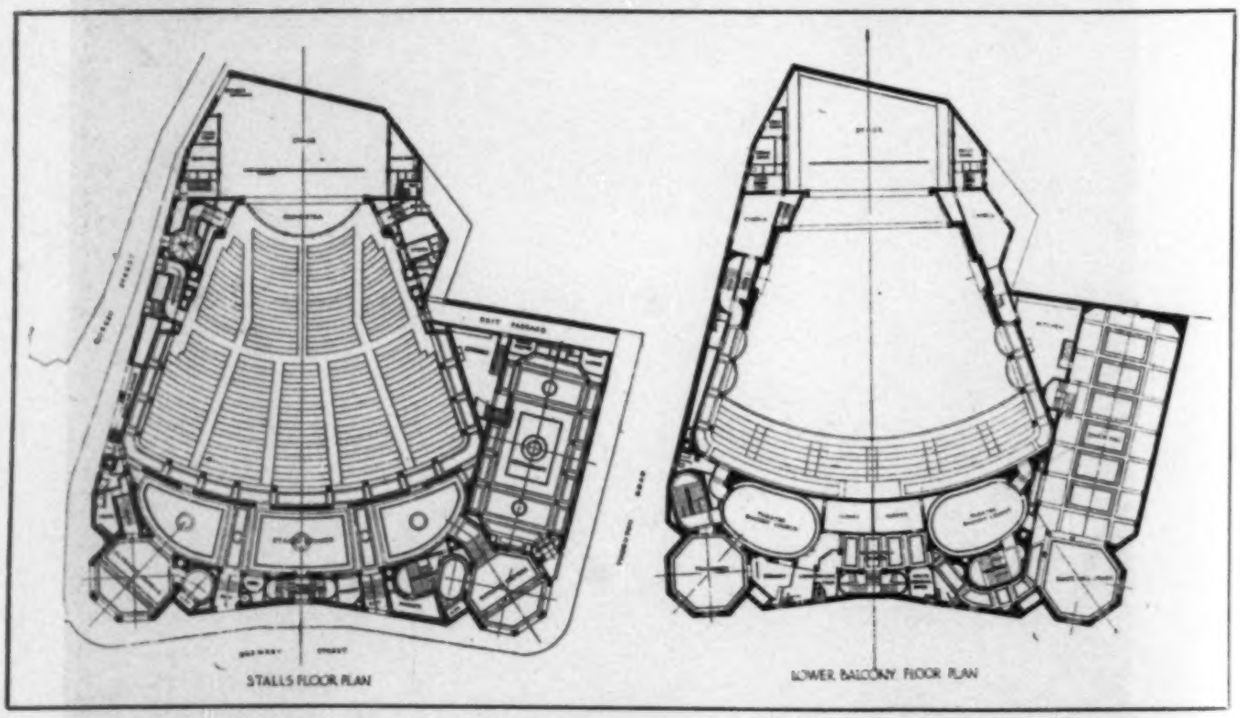


The New Victoria Theatre, Bradford.

Mr. William Illingworth, F.R.I.B.A., Architect.

DEVELOPMENT OF THE CITY OF WASHINGTON

SIR BANISTER FLETCHER occupied the chair at a special meeting of the R.I.B.A., at Conduit-street, on Monday night, when Mr. Frank Baldwin, Secretary of the American Institute of Architects, gave a lecture, illustrated with slides, dealing with the development of the City of Washington.

That city, said the lecturer, was one of the three large cities of the world which were built upon a definite pre-ordained plan—the others being Alexandria, and St. Petersburg. The city of Washington was the outgrowth of the determination of the First American Congress to move from Philadelphia after the Revolutionary War, and the site was chosen at the confluence of the Potomac River and the Anacostia, partly in the State of Virginia and partly in Maryland, and a section 10 miles square was set apart and named the District of Columbia. Here President Washington ordered that the construction of the city should be begun. Plans were set on foot, and to a limited extent they had been followed. The original plan was called the Ellicott plan, though it was largely, perhaps chiefly, designed by Major L'Enfant, a French engineer, whom Washington brought into his service.

The main point of the plan was that it was arranged round one main axis. He had heard the opinion that it was laid out on the French idea of military defence, and that the intersecting avenues were intended to offer military opportunity for the prevention of rebellion or uprisings of any sort. On this plan the city was developed from 1792-1800, and the buildings that were erected at that time followed distinctly the plan as intended by President Washington and his secretary, Thomas Jefferson. There were practically no departures for fifteen or twenty years. Then, unfortunately, in the haste of making a great country, the ideals were lost and subsequent Presidents, notably—he could even say notoriously—President Jackson, for the next 75 years utterly disregarded the plan of the city; they built where they chose, without regard for decency and order. And there had been some tragic errors, which they were now trying to rectify.

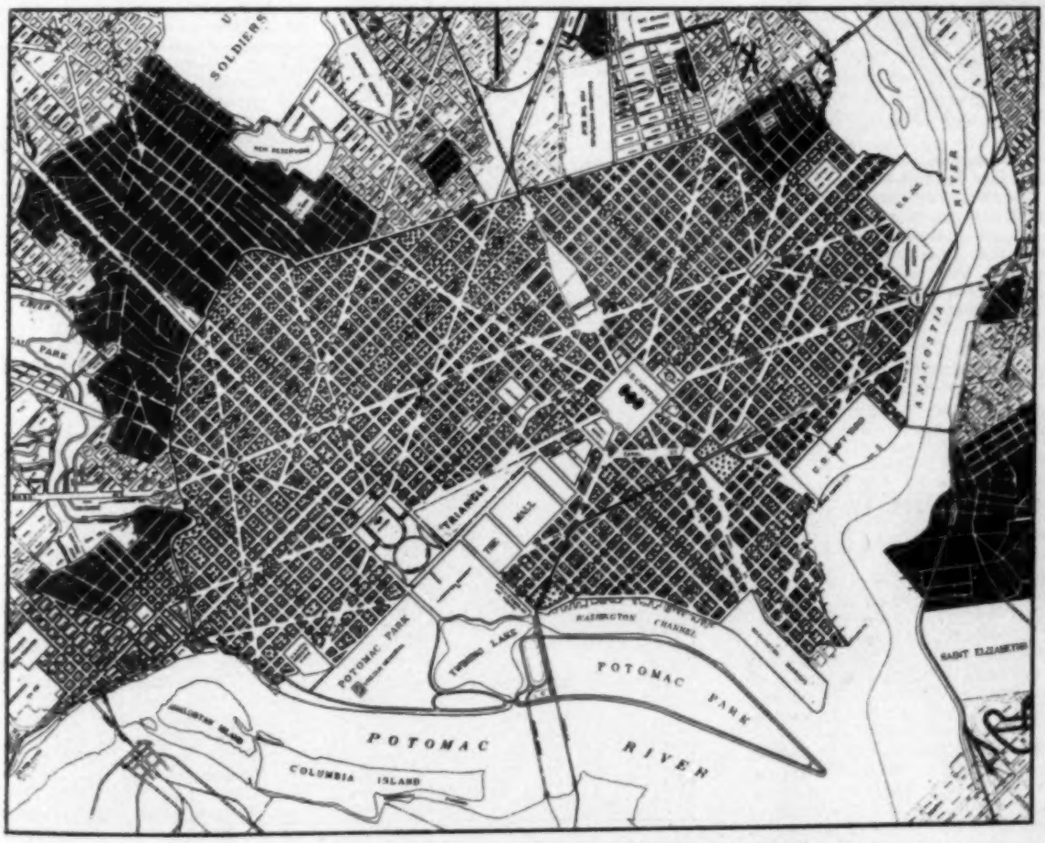
In 1900 came a new birth, a new thought. As his audience, said the speaker, would recall, in 1893 the World's Columbian Exhibition was held in Chicago, and there was the first opportunity in America for the exhibition of what could be accomplished by the collaboration of the Arts. This was the source of the inspiration, in 1900, to appoint a Commission—of which Senator James McMillan was chairman. He was a man of great executive ability, grand vision, and possessed of architectural and artistic appreciation. McMillan organised this Commission, and grouped around him the best talent—not only architectural, but landscape, painting and sculpture. Thus was created the new plan—though it was really a rebirth or crystallisation of the L'Enfant plan. From that time, 1900, the McMillan plan of Washington had been followed.

The lecturer then proceeded to show slides showing various aspects of the city, with some of its principal buildings and monuments; amongst them the Union Railway Station (which is the only railway approach that enters the city, all railways coming into that station); the Capitol (designed about 1792, by William Thornton); the Post Office Buildings; the Washington Monument; the White House (which got its name, according to the lecturer, because it was badly discoloured through fire by the British in 1814, and subsequently had to be painted white); the Pan-American Buildings, built by Andrew Carnegie, and designed by the young Frenchman, Paul Cret; the Treasury Buildings; and the Carnegie Public Library.

In returning to the planning and development of Washington in the last few years, the lecturer said that the last Congress passed two exceedingly important Bills. One was known as the Shipstead Act, and it forbade the erection, within 200 ft. of any public park or public building in the city, of a building of any kind until the design had been approved by the National Council of the Fine Arts. That was pretty far-reaching, but it would be wonderfully beneficial to the city. The other Bill granted to the Secretary of the Treasury full powers to select, at his own judgment and in his discretion, the architect for any public building, without competition and without regard to politics, if he chose to disregard them. The present Secretary, Mr. Mellon, was a very strong and astute man. He had surrounded himself with a group of the ablest architects in the country, and they began to study the immediate needs of the city as far as the Federal Group of buildings was concerned, and began to work in collaboration. These were to be placed upon a "triangle" at present occupied by poor buildings and bounded by Pennsylvania-avenue and the Mall.

[This "triangle" is indicated upon the accompanying plan.—ED.]

When he asked them, said the lecturer, to think of the plan, he wanted them to



Lay-out plan of Washington, showing successive stages of Development.
(See Legend above.)

realise that it was not a dream; even if it was not an actuality at the moment, it was under way. He did not wish to attempt to measure the importance of the movement in money standards, but it might interest them to know that there had already been expended in the purchase of property—and in appropriations for certain buildings on it—£40,000,000, and that only started the project.

In conclusion, the speaker referred to the fact that in 1933 they hoped to welcome all the architectural societies of the world in Washington at the International Congress. He would ask all those who had been to America and knew its problems to help make that Congress a great success.

Discussion.

The President, in asking Dr. Raymond Unwin to move a vote of thanks, said that he felt sure all would try to be present on the occasion of the Washington Congress, because he felt that would be a most interesting event.

Dr. Raymond Unwin said that in Washington they saw a city which was planned from the beginning, which was laid out upon a magnificent scale, which took quite a long time to grow up to anything like the scale on which it was laid out, but now had grown to a stature adequate to adorn that scale. It was a triumphant example of the advantage of planning even when planning took place at a period when nobody could foresee the enormous changes in the character of city life and city traffic and city buildings which were going to take place. He thought it was a triumphant example of the truth that any plan was better than no plan. In England we were used to quite different conditions, particularly in London. We were used to handling great cities packed with mistakes. If we in England were to show equal reverence for all our past buildings, we should have some difficulty in introducing into, say, London, any of the features of the scale of magnificence that Washington provided. While, therefore, we were mainly stimulated and helped by the example of what could be done by planning, with long and large views, when we did plan we should not try to copy, in our devious streets of London, those vast avenues and vistas which we were glad to admire.

Mr. H. V. Lanchester, seconding the vote of thanks, said that he had always regarded Washington as the beauteous daughter of a French father and American mother. The French father gave a lively pattern of discordances, and the American mother contributed the gridiron that civilised them. He was pleased to see the effort mainly directed towards the elimination of those discordances.

Professor Ernest Willey (Professor of Architecture, University of Michigan) also spoke.

Mr. Baldwin replied briefly, and proceedings then terminated

A PERSPECTIVE PROJECTION CHART

THE Perspective Projection Chart illustrated on this page is one of an entirely new type, devised by Mr. John Swarbrick, F.R.I.B.A., of 30, Maddox-street, London, W.1. This chart, it is claimed, makes it possible to delineate a building or group of buildings in true perspective, without setting up lines of heights and finding vanishing points. By this new method, we are informed, the procedure which has been adopted for hundreds of years can be dispensed with; it is only necessary to ascertain the angle of altitude and the angle of lateral deviation of each point in relation to the eye of the observer. Proceeding in this way, the points are plotted on the chart, and by producing lines from point to point the perspective drawing is gradually prepared. The chart should be regarded as the picture plane. The horizontal line through the centre of the diagram represents the horizon. Each quadrangle defines one degree both laterally and vertically. It is quite easy to check the accuracy of a drawing made in this way by finding the vanishing points and ascertaining whether the lines vanish correctly. A drawing made by this method, if properly prepared, is, we understand, scientifically correct, as there cannot be any manipulation of the results for the purpose of obtaining some artistic effect that would not appear in the actual building. Normal views are naturally plotted above the horizon, in the upper part of the chart, and bird's-eye views in the lower part, below the horizon.

An engineer or surveyor accustomed to use a theodolite might easily record the various points graphically on this chart instead of in a book. The actual readings might be entered on the chart as well, if necessary. In this way the survey would be automatically recorded accurately in perspective. Anyone unfamiliar with the laws of perspective could, we understand, produce an accurate drawing in perspective on this diagram. All that would be necessary would be to ascertain and plot, horizontally and vertically, angles in relation to the eye with precision. Copies of the chart may be obtained from the Wykeham Press, 14, John Dalton-street, Manchester.

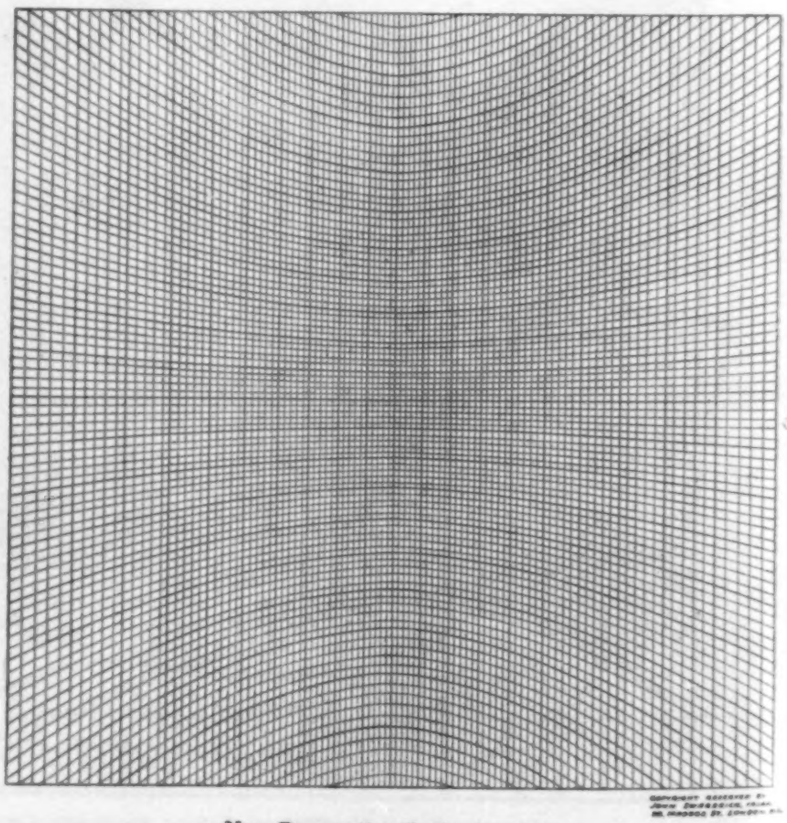
BOOK REVIEWS

American Architecture. By FISKE KIMBALL. The Bobbs-Merill Co. London: 90, Great Russell-street, W.C.1. Price 12s. 6d. net.

It is seldom that one can say of an architectural book that it is a pleasure to read it for its literary qualities, but Mr. Kimball has here given us the exception, a book that can be read with profit and pleasure from beginning to end. Illustrating his way with excellent photographs, he carries us along the track of American architecture from the earliest English wigwams to the most up-to-date skyscrapers. In an analysis of eighteenth-century influences he shows that the absence of any body of professional architects was counterbalanced by a continuous influx of architectural books when architecture formed part of the education and interest of the gentleman. Its fall from this position of pre-eminence as a cultural subject, due mainly to industrialism, was probably the most staggering shock ever inflicted upon art—a blow from which we have by no means recovered. Recent American history carries us from one prodigious creation to another, until we are appalled at the competitive rush for height in steel-framed buildings. One of our best-known European architects said of the steel frame that it represents the end of architecture. The author frames the reader's thought when he says: "Even at home the evolution outruns its own causes and advantages; its protagonists are aghast at the final result. Already the drawbacks are apparent, and limiting forces begin to operate. It has been none too soon." These monsters, with all their beauty of form, are capable of turning upon those who made them.

The Mechanics of Building. By A. D. TURNER, A.C.G.I., A.M.I.C.E. London: Sir Isaac Pitman and Sons, Ltd. 123 pp. Price 5s. net.

In the preface to this book it is stated that the author's objective was the presentation of certain problems in the simplest possible manner, avoiding the use of high mathematics. To reach this end he makes use of well-known geometrical methods to avoid the processes of integration. But we fear that his readers will find it very difficult to employ the methods proposed without additional assistance. And if a new edition should be considered, it would be wise to expand these explanations, indicating each step in the process of reaching the solution of any problem that one may have in hand.



New Perspective Projection Chart.
Devised by MR. JOHN SWARBRICK, F.R.I.B.A.

STEEL STRUCTURES CONFERENCE

A CONFERENCE on steel structures research, to discuss the need for a national code for the building industry, was held last week, under the auspices of the Department of Scientific and Industrial Research, at the Institution of Civil Engineers. Most of the professional and trade organisations concerned in the use of steel and all branches of the building industry were represented, and messages of support were delivered from the Ministry of Health, the Home Office, the Colonial Office, various of the Colonies and Dominions, the Royal Institute of British Architects, the Association of Municipal Corporations, the Urban District Councils' Association, Rural District Councils' Association, the London County Council, and various of the leading provincial cities.

In opening the Conference, Sir Clement Hindley, K.C.I.E., the Chairman, said that the primary object of the Conference was to bring the work of the Steel Structures Research Committee to the notice of those authorities who had statutory control over building operations in this country and in other countries of the Empire. The Committee, in its membership, comprised distinguished engineers and designers nominated by the Institution of Civil Engineers, technical representatives of the manufacturers nominated by the British Steelwork Association, and other engineers and designers appointed by the Department of Scientific and Industrial Research, including the Architect to the London County Council. It must be remembered that building regulations and their application had a very important bearing and influence on the work of the designer and the manufacturer. Practice in design and construction which might have the sanction of accurate scientific knowledge might not be admissible under existing regulations and the routine application of those regulations. Whether from the point of view of the user of the building, who had to foot the bill, the designer who wished to give the user the best value for his money, or the manufacturer who wished to see his product used to the best advantage, or, again, from the point of view of the authority who was concerned primarily with stability and safety, it was obvious that the interests of all would be best served by using the most effective methods that could be devised by modern scientific knowledge. For this reason the Committee had decided to issue as soon as was practically possible an interim Report, in which they would formulate a suggested code of practice in the design of steel structures based on the present state of scientific knowledge and practical experience. As the work of research and investigation proceeded it was hoped that the results obtained by the Committee would be incorporated from time to time in this code and thus become available in practice. What the Committee was aiming at was contained in the expression, "Progressive standardisation as a continuous process."

The following resolution was then moved by Mr. David Anderson (Institution of Civil Engineers):—Whereas this Conference has heard with great interest of the work of the Steel Structures Research Committee of the Department of Scientific and Industrial Research, and has been glad to be informed by the Ministry of Health of the facts in relation to the public control of building in England, Wales and Scotland, and has noted the aims of the British Steelwork Association, and the position of the British Engineering Standards Association, the Conference hereby resolves that it will be most valuable to have a standard practice for the employment of structural steel in building, and trusts that all bodies concerned will take steps to ensure that the results of the work of the Steel Structures Research Committee are effectively applied as they accrue.

The motion was seconded by Mr. Wm. Turner MacLellan, C.B.E. (president of the British Steelwork Association) who said that the building industry was, next to agriculture, one of the principal industries in the country and exerted a wide influence on other industries, and with the advance of building science, possibilities of employment were immense. The advance of building construction had brought new factors into consideration of a highly technical nature. We had entered on a new era of constructional technique in steel, and to get the full advantages of this required adaptability beyond our previous conceptions. He hoped this work would provide local authorities with the best available scientific backing, and assist them in problems which demanded the use of the best technical resources of the country and at the same time be of assistance, not only to public bodies, but to all engaged in the building trade. The standard code of steel work practice had already its parallel in the case of bridges, which could be designed with uniformity by the British Engineering Standards Association and the Ministry of Transport loading regulations, and a steel frame building was really only a vertical aspect of the bridge problem.

The steel industry welcomed the presence of Empire representatives. Canada, he understood, had had a standard code of steel frame practice since 1923. As the whole family of the Empire had met in conference, the steel industry felt that the question of co-operation in research and standards was one of great promise. Trade could be made more fluid by Empire standards, and his Association commended this to the serious consideration of the Imperial Conference.

Mr. A. N. C. Shelley, of the Ministry of Health, said the Minister of Health was considering how far the results of the conference could be applied, while at the same time retaining the fullest possible local freedom in by-laws.

Mr. G. M. Burt (Institute of Builders) said that the Institute and the National Federation of Building Trades Employers were very glad to be represented at that important conference. They would appreciate that neither the Institute of Builders nor the National Federation had had much opportunity of discussing this matter in any detail. Before they could definitely pledge themselves to support it, it must naturally be placed before their members, but they were very interested in the whole question. The composition of the Steel Structures Research Committee was a sufficient guarantee of its technical competence, and he could assure them both the Institute of Builders and the National Federation were keenly alive to the need of the work which was to be undertaken by this committee, and they very much hoped that the movement would lead to simplification of building processes and the reduction of costs. The speaker pointed out that the work of this committee or of any other committee must be entirely wasted, or practically wasted, until they got a revision of the building by-laws and revision in their administration. There was one small addition that he would like to see to the resolution. The Steel Structures Research Committee was a new committee, and it had a new name. It was primarily, and it was quite clearly stated that it was, a research committee, and he would like to suggest that the most effective way of putting its findings before the public, and for the results of research work to have the most effect, would be for its results to be sent to the British Engineering Standards Association so that those results could have the consideration of the whole industry and be brought into line with standard practice, or perhaps he should say standard practice brought into line with the findings of the committee.

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Other speakers included Dr. H. M. Tory (Research Council of Canada), Mr. J. Davies (representing High Commissioner for Australia), Dr. Marsden (New Zealand Department of Scientific and Industrial Research), Mr. W. A. Day (South African State Rail-

ways), Mr. M. Wilson (British Engineering Standards Association), Mr. B. S. Townroe (Building Industry Council of Review), Mr. A. Dryland (Institution of Municipal and County Engineers), Mr. Ewart S. Andrews (Institution of Structural Engineers), Mr. T. Wallis Gordon (Association of Municipal Corporations), Mr. A. O. Knight (Urban District Councils' Association), Mr. H. T. Holloway (National Federation of Building Trades' Employers), Mr. R. Coppock (National Federation of Building Trades' Operatives), and Mr. R. B. Dunwoody (Association of British Chambers of Commerce).

Upon the Chairman putting the resolution to the Conference, it was carried unanimously.

THE REPORT OF THE MINISTRY OF HEALTH

We have just received the Eleventh Report of the Ministry of Health, and it is of unusual interest and importance, since it is the first Report to appear since the passing of the Local Government Act, 1929, and the Rating and Valuation (Apportionment) Act, 1928, known as the Derating Act. In a first notice it is impossible to do more than glance at one or two of the subjects dealt with, leaving others for more detailed consideration.

Housing.

In the last Report, 1928-9, the number of houses built since the Armistice was, with State assistance, 829,000; without State assistance, 446,000; total, 1,275,000. The figures given in this Report, 1929-30, since the Armistice are as follows:—With State assistance, 939,030; without State assistance, 537,618; total, 1,476,648; from which figures we derive the result that during the year 110,030 houses were built with State assistance and 91,618 without it, a total of 201,648. The Report is not so detailed as former Reports dealing with this subject, and it is not clear whether after the subsidies under the Act of 1923 ceased to be payable after September 30, 1929, houses constructed by actual private individuals are included in the Report, but we gather that is the case. The matter is obscured by a passage in the Report at page 78, which states: "It is perhaps not so well known as it ought to be that, while the provision of houses for letting must under existing conditions remain to a considerable extent a function of local authorities, the Housing (Financial Provisions) Act, 1924, provides for similar financial assistance to private enterprise as to local authorities where private enterprise is prepared to build houses for letting under like conditions. The expression 'Private enterprise' in this connection includes public utility societies and similar bodies which from philanthropic motives take a part in the re-housing of the working classes and especially of the poorer sections of them." A little further down on this page it is stated: "To all classes of private enterprise the subsidy can be paid by the local authority, but to public utility societies and similar bodies it may alternatively be paid by the Minister." The private individual has dropped out of subsidy and "private enterprise" as now applied seems limited to the bodies mentioned in Section 3 Sub-section (2) of the Act of 1923, that is, "any society, body of trustees or company established for the purpose of, or amongst whose objects or powers are included those of constructing or facilitating or encouraging the construction of dwelling-houses for the working classes being a body of trustees or company which does not trade for profit . . ." with the further limitation that under the Act of 1924 the houses must be built for letting under the conditions there prescribed.

In several particulars the form of the Report is varied from that of its predecessor. For instance, the table showing the payments of Exchequer subsidies since the War is omitted, and what is perhaps more important, the table showing the cost of houses, for it would have been instructive to see whether the increase in the subsidy had the effect which in some quarters it was contended it had always exerted in raising the cost of houses. The only statement we can find in the Report bearing on this question is a statement on page 76 that in September, 1929, the average price of a parlour house had fallen to £423. On turning to the Report for 1928-29 we find that in March, 1929, the quarterly average price of a parlour house was £413, the price having consistently fallen during the whole year. The Housing (Revision of Contributions) Act was passed July 25, 1929, so from the above statement it appears that a rise had taken place in the cost of the parlour house by September of £10, and no particulars appear to be given of the price in March, 1930, the time limit covered by this Report.

In our notice of the report for the year 1928-9 we ventured to regret that more particulars were not given of the cost of building, and the present report gives fuller particulars, but, so far as the point we have made above is concerned, they show that any rise in price of parlour houses that may have taken place is not due to higher costs of building or building materials, as it is stated that there has been a general decline in the cost of building, and as regards materials the tendency has been downward.

Under a new heading, "Cost of Building," however, some interesting information is given. After alluding to the general decline in the cost of building, the report states that the monthly returns from local authorities show that the average price per square foot of parlour and non-parlour dwellings, exclusive of tenement block buildings, has declined from 9s. 6½d. in the year ending 1929 to 8s. 8¼d. in the year under review, these returns being based on tenders and direct labour estimates approved, and being exclusive of the cost of land, roads, sewers, and fees. A table is given, showing the cost of non-parlour dwellings with two or three bedrooms, for which tenders or estimates have been approved in the year ending March 31, 1930, with the numbers of houses to be erected at different costs, and the costs commence below £200 for 20 houses and rise to £390 to 400 for 1,542 houses, but the numbers to be erected bear no progressive proportion to the cost of the houses. The greatest number of houses, 7,214, stand at the cost each of £340 to £350.

The report comments on the variations shown in cost, and it contains some observations on direct labour. "Some local authorities endeavour to control the cost of building by the employment of direct labour, and there appear to be some grounds for the view that houses erected in this way may, apart from any question of a reduction in cost, be better finished than those erected by some contractors in the absence of effective supervision of their work on behalf of the local authority. There are, however, but few cases in which the final accounts of schemes of this kind have as yet been received, and it is not possible to state any definite conclusions about the savings effected or the conditions in which such savings are to be expected." The report observes that local authorities do not always pay sufficient attention to the possibility of getting a further reduction in their tenders, either by revising the plans or by adjusting their programme of building to the supply of materials and labour available, and so obtaining the advantage of a falling market.

Although, as stated above, the table of Exchequer subsidies is omitted in its usual form, under the heading "Administration of Schemes" a very comprehensive idea is given of the sums expended on housing. It is stated (page 81) that the total capital expenditure on housing schemes carried out by local authorities since the War up to March, 31, 1928, was £342,600,000, and that it is estimated that the corresponding figure up to March 31, 1930, is £400,000,000. The Exchequer contribution for the year 1927-8 was £9,874,000, and the total amount contributed by the local authorities out of the rates in the same year was £2,284,000. The present value of the Exchequer subsidy payable on houses erected by local authorities is £7,335,000. In connection with this heavy expenditure there are in the Report some observations addressed to local authorities on the question of rents. It is pointed out that local authorities do not generally adopt a differential scale of rents. They, as a rule, only build one or two types of houses of uniform standards of amenity and let them at uniform rents, giving the full benefit of the subsidy to each tenant, no matter what his means; but it is open to local authorities to charge a differential rent provided that the average rent is not above the statutory maximum, and thus it is pointed out that it is possible, by concentrating the greater part of the total subsidy received on the houses designed for the poorest tenants to fix rents, without any burden added to the rates, which leaves no excuse for any tenant to fall into arrears.

Rating.

The total of the rateable values in England and Wales, outside London, under the new valuation was £234,728,938, as compared with the corresponding assessable values under the preceding valuation lists of £206,733,903, an increase of 13¼ per cent. The total valuation for the whole of England and Wales for the purposes of levying general rates—that is, assessable value in London and rateable value under the Rating Acts, 1925 and 1928, was £292,373,015, as compared with £267,638,769, the figure given in the Report, 1927-28. The latter figure gave an average of £6 15s. 7d. per head of the estimated population, whereas the new figure makes that charge £7 7s. 8d. The average amount in the £ of the rates in England and Wales in 1929-30 is given as 11s. 5d. Taxation was recently estimated by the Finance Committee of the Association of British Chambers of Commerce to amount to £15 1s. 5d. per head of the population, therefore these joint figures give some idea of the national burden and support the demand for national and local economy.

Local Debt.

The outstanding loan debt is given as £1,121,258,965, as compared with £1,027,857,547 in the previous Report—an increase of £93,401,418. There are always certain adjustments and credits to be made in respect of these sums, but, as we have observed on previous occasions, sufficient attention is never shown to the increase in the local debt, although the National Debt is subjected to the closest scrutiny and criticism.

Our space has compelled us merely to touch lightly on a very few of the subjects contained in this Report covering a very wide field, but we propose in a future article to refer to that portion of the Report which relates to private street works, as in continuation of a section in the Report of 1928-9 it contains some notes of decisions given by the Ministry, both under the Public Health Act and the Private Street Works Act, of considerable public interest.

New Bridge Over the Tees.

Work on the new bridge over the Tees will probably be begun before the end of this year, according to a statement made by the Town Clerk at a meeting at Middlesbrough attended by representatives of the North Riding Council and all local authorities between Saltburn and Thornaby. The Bill sanctioning the scheme has received the Royal Assent, and tenders will be invited shortly. The site of the bridge and approach roads are already marked out. The Ministry of Transport will contribute three-quarters of the total cost of £600,000.

ILLUSTRATIONS

(*Continued from page* 690.)

together with four music-rooms and a class-room.

The remainder of the work, of which the War Memorial tower forms the central feature, has been carried out in sections as the money has been available. The erection of the south or Devonshire wing followed closely on the completion of the tower, and was carried out in two sections. It contains the armoury and drill hall, five classrooms and a workshop about 60 ft. in length. The "Arnold" wing completes the whole scheme and contains a bird-room to house the magnificent bird collection which Mr. Arnold leaves behind to the school as another memorial to his tireless activity and to his ability as a naturalist of at least national reputation. Six carved stone panels on the east elevation bear testimony to this fact and embody with other motifs Mr. Arnold's arms and crest. The rest of the ground floor comprises the masters' common-room, headmaster's and bursar's offices, and on the upper floors there are five large and two small classrooms and a drawing school of the same dimensions as the workshop in the corresponding south wing.

The elevations are simple and balanced with the tower as a central feature. Tradition and the scale of the buildings already existing have been studied and a free Tudor inspiration in brick and stone with a tile roof has been adopted. The work has been designed by Messrs. Tatchell and Wilson, FF.R.I.B.A., Mr. Wilson being himself an Old Eastbournian, and it is fitting to think that the work which from first to last has been inspired by Mr. Arnold, should be completed as a memorial to him, when the chairman of the Council (Major-Gen. Sir Arnold Sillem), the headmaster (Mr. C. V. Carey), and the bursar (Major S. H. Foot) are all Old Eastbournians.

The general contractors for the recently executed work were Messrs. Chapman, Lowry and Puttick, Ltd., of Haslemere, Surrey. Messrs. Walter Lawrence and Son, Ltd., were the general contractors for the tower and south block. The principal sub-contractors were as under, the stone carving having been executed by Mr. George Alexander:—Messrs. Durbin and Sons, central heating; Thos. Elsley, Ltd., rainwater goods; Bainbridge, Reynolds, Ltd., wrought-iron gates, etc.; Jacob, White and Co., Ltd., electric light and power; Kleine Patent Fire-resisting Flooring Syndicate, floors; Smith, Walker, Ltd., constructional steelwork; C. E. Welstead, Ltd., lead light casements; Hollis Bros., Ltd., wood block floors; S. and E. Collier, Ltd., tiles; Daneshill Co., bricks; Weldon Quarries, stone.

Hammersmith School of Building and Arts and Crafts.

This new building, which links up the earlier buildings, has been designed and carried out under the direction of Mr. G. Topham Forrest, F.R.I.B.A., F.R.S.E., F.G.S., the Architect to the London County Council. The one-story back wing of the Trade School has also been raised by two floors. Some degree of remodelling has been necessary in the old Art School to meet the requirements of the building trades and for the establishment of up-to-date dining and refreshment-room arrangements. A new main entrance has been planned on the Lime-grove front with a hall and main staircase, and near this the administrative rooms are placed. Adjacent to this entrance an arched gateway gives access to a paved court leading to the stores for building trade materials, fuel, etc., in the rear.

The ground floor is occupied largely by the building workshops, masonry, bricklaying, plumbing, plastering and wood-working machinery, and the first floor by a carpentry workshop, a laboratory, and the classrooms and drawing offices of the building department. The second floor contains rooms for painting, cabinet-making and architecture connected with the art department; while on the third floor are the modelling, life, still life, design and antique studios of that department, together with rooms for embroidery and etching.

The second floor of the old art school is devoted to common-rooms and refreshment arrangements for students and staff, the large new students' dining-room being placed *en suite* in the adjoining new building. The gymnasium is situated on the ground floor in a central position in the building, while the library is on the first floor facing Lime-grove. Separate cloak-rooms are provided for the male students of the building and art department and for female students. The schoolkeeper's quarters are placed on the second and third floors over the main entrance.

The larger part of the new building is steel framed with brick filling, resting on concrete piers which are carried down to a considerable depth to reach a sound gravel foundation. The steel stanchions and girders are generally exposed to view, the remainder of the construction being also of fire-resisting materials. The portion facing Lime-grove is of normal brick construction, the external treatment being in conformity with that of the adjoining Trade School.

The exterior of the new building is faced with red sand-faced bricks from Reading, the interior generally being finished in fair faced brickwork with coloured tile dadoes in corridors, staircase and many of the classrooms. The windows are mostly steel casements built directly into the brickwork with highly inclined patent glazing lights in the studios on the third floor. The building is warmed by a low-pressure steam system with radiators ventilated where they occur on exterior walls. Lighting by electricity is provided throughout and there is also a system of electrically synchronised clocks. The heating and electrical installations were carried out under the supervision of Sir George Humphreys, K.B.E., the Chief Engineer to the Council.

The building contractors were Messrs. C. P. Roberts and Co., Ltd., of Tyssen-street, Dalston, whose tender price amounted to £45,800. The following were the principal sub-contractors:—Dorman Long and Co., constructional steelwork; The Natural Rock Asphalt, Ltd., asphalt; S. and E. Collier and the Daneshill Brick and Tile Co., facing bricks; Williams, Smith and Evans, roof tiling; W. James and Co., Ltd., steel casements; The Standard Patent Glazing Co., Ltd., patent roof glazing; Carter and Co., Ltd., wall and floor tiling; T. A. Harris, Ltd., sanitary fittings; Jos. F. Ebner, wood-block flooring. The heating system was carried out by H. J. Cash and Co., Ltd., the electric lighting by the Alpha Electrical and Manufacturing Co., the electric lift by Pickering, Ltd., and synchronised clocks by the Synchronome Co., Ltd.

The New Victoria Theatre, Bradford.

Situated in the centre of the city, with a seating capacity of 3,500, a large restaurant, spacious ballroom and comfortable lounges, the New Victoria, Bradford, has spacious entrance halls and waiting rooms on the various levels, which lead into the auditorium. This is fan-shaped, measuring 150 ft. at the rear. The steep, single balcony is arranged in two tiers with the projector room, etc., between. Balconies project little and rise backwards over other parts of the building, with a minimum of seats in the "pockets" beneath. The decoration is in the Italian Renaissance manner, adapted to modern requirements.

Owing to the practically island site upon which the theatre stands, and also owing to its great size, two entrance halls are provided for the cinema, with another two for the café and ballroom respectively. The octagonal entrance halls to the cinema have been decorated in the Italian manner, with stone-lined walls and richly-modelled ceilings. These lead into a stalls lounge, the walls of which are (between decorative pilasters) covered with a rich damask paper, the pattern of which has been copied from an original Italian damask. Each entrance hall has a lobby from which a lift rises to the rear of the upper balcony. The screen is placed about 10 ft. up stage, making a throw of nearly 140 ft. from the projector room, and is 170 ft. from the rear seats of the upper balcony. The proscenium is 50 ft. wide and 34 ft. high. The specially-designed moving stage is 70 ft. wide and 43 ft. deep, and completely equipped for stage play purposes, for which the theatre is fully licensed. Scene docks, dressing rooms, chorus and band rooms are provided.

Provision is made for the accommodation of an orchestra, with the organ console in the centre, constructed to rise to stage level when required. The Wurlitzer organ in the roof is connected to a grille over the proscenium by a curved tone duct, 40 ft. wide at the organ and 66 ft. wide on the mouth.

Ample provision has been made for refreshment rooms. There is a tea lounge on the lower balcony floor and a restaurant on the ground floor. The restaurant is connected by a staircase to the ballroom, which has an area of 450 sq. yds., and is provided with a spring floor and locking device.

The ventilating plant has been designed on the most up-to-date lines. Before the air is admitted to the auditorium it is passed through a chamber filled with finely atomised water, where it is thoroughly washed and suitably humidified. This fresh, clean air is then warmed to the required degree and admitted to the auditorium through ornamental grilles in the rear wall, the vitiated air being removed by a powerful exhaust fan through grilles near the ceiling on either side of the proscenium. A total quantity of 60,000 cu. ft. of air is admitted every minute, or 120 tons every hour.

The lighting is an arrangement of many coloured lamps, with which a number of colour effects can be obtained as the result of switching on different circuits of lighting, and the seven colours of the spectrum can be obtained and reflected from the ceiling of the theatre. The lamps have been concealed in the plaster work.

The stage lighting equipment is of the latest type. The installation has been carried out with local labour under the supervision of the Gaumont-British Picture Corporation and Provincial Cinematograph Theatres, Ltd., Engineering Department, and the scheme of planning of the lighting, etc., under the personal supervision of Mr. E. C. Nichols, A.M.I.E.E., chief engineer to the companies.

Messrs. McLaughlin and Harvey, Ltd., are the general contractors, and the following are sub-contractors:—Concrete, Ltd., concrete floors and "Terrazzo"; Thos. Hill and Sons, plumbers; Hill and Nelson, slaters; Blythe Walter, leaded lights; J. Bennie, Ltd., lifts; Hy. Barrett and Sons, steelwork; Clark and Fenn, Ltd., fibrous plaster and decoration; North British Rubber Co., rubber floors; Tunstalls, Ltd., asphalt; E. Oldroyd and Co., safety curtain; F. Birkett, counterweights; J. Jeffrey and Co., heating and ventilation; Shaw's Glazed Brick Co., terra-cotta; H. Edgeley, lightning conductors; W. H. Heywood, Ltd., patent glazing; Art Marble and Mosaic Co., marble work; L. B. Lockwood, seating; Kinematograph Equipment Co., carpets, curtains, pelmets; Sutcliffe Bros., canopies and ironwork; A. Halliday, ornamental balustrades; E. Fearnley and Sons, prepared joinery; Benham and Co., kitchen equipment; Andrews, Ltd., tiling; Tucker and Co., patent composition flooring; Eaton, Parr and Gibson, mirrors; Hollis Bros. and Co., dance hall flooring, Craven Hall; Francis Morton, Jun., and Co., spring floor; Wilks Bros., handrails; W. Pearce, Wurlitzer organ; Ewart and Co., copper domes; Henry Hope and Sons, metal windows; F. H. Pride supplied and manufactured all decorative glass lighting, reflectors for concealed lighting and interchangeable exterior signs; W. and R. Leggott and Co., hardware and art metal.

Mr. William Illingworth, F.R.I.B.A., is the architect

NOTES ON LONDON BUILDING ACT, 1930

By W. T. CRESWELL, Barrister-at-Law, Hon. A.R.I.B.A., Associate (late Fellow) of the Surveyors' Institution, etc.

I.—ENFORCEMENT OF PROVISIONS.

Attention was drawn to this Act in *The Builder* of August 22, a short summary of the Act being then given.

Mention was made of the fact that there is little, if any, definitely new matter in the 1930 Act; but, nevertheless, it is of far-reaching importance to the architect, the builder and the constructor in that it collects and consolidates all the enactments which have accumulated relating to streets and buildings in the London area.

In these circumstances, a series of articles, of which this is the first, will seek to bring before the special attention of readers the most salient points of the new Act with which the architect, the builder and the constructor are more particularly concerned.

The new Act came into operation on October 1, 1930, and its operation is confined to London only, as its title suggests. Its provisions are mainly enforced by :—

(1) The London County Council, the local authorities (that is, the councils of the various boroughs) also performing some few duties as set out in the Act.

(2) The tribunal of appeal, which, under the Act, consists of three members, one of whom is appointed by each of the following : (a) the Secretary of State, (b) the Council of the Royal Institute of British Architects, and (c) the Council of the Surveyors' Institution. Further to these three, when there are under review matters concerning buildings of metal skeleton construction or of reinforced concrete, there is to be added a fourth, viz., a member appointed by the Council of the Institution of Civil Engineers. The decisions of the tribunal in matters which come before them under the Act are final. It is open, however, for the tribunal to state a case for the opinion of the High Court; and if the tribunal, because several parties are dissatisfied with its findings, decides to state several cases and not only one case, the court will not interfere with the discretion of the tribunal in so proceeding. (See R. *v.* Tribunal of Appeal, *ex parte* L.C.C. (1912), 76 J.P. 345.) The powers of the tribunal to make its own rules of procedure (subject to the approval of the Lord Chancellor) are retained; its orders are enforced by the High Court as though they were orders of that Court. The regulations now in force are those made by the Tribunal of Appeal on April 23, 1914. They also determine the fees payable to the tribunal by appellants and others.

(3) The superintending architect. Under the provisions of the Act, and for the purpose of aiding its execution, the County Council may appoint "the superintending architect of metropolitan buildings," who may in certain circumstances appoint a deputy. It is the superintending architect who amongst other things defines the general lines of buildings when required (section 22) and who also determines the front and rear of buildings (section 50), and in which streets they are deemed to be situated (section 29).

(4) Furthermore, to enforce the Act, there are district surveyors, who hold their appointments from and under the County Council, but a person who has not already filled the office of district surveyor must previously have some such qualification of competency, as a certificate from the Royal Institute of British Architects, or must have been examined in such other manner as the Council may direct and been found competent. A district surveyor's district is fixed and varied by the County Council, who may dismiss him or suspend him. In Notley *v.* L.C.C. (1915), 3 K.B. 580, it was held that the L.C.C. could dismiss a district surveyor appointed after August 14 1855, at their pleasure. All buildings and structures and all work done to or on or upon any building or structure and all matters relating to the width and direction of streets, the general line of buildings in streets, the provision of open spaces about buildings and height of buildings are subject to the supervision of the district surveyor. In Westminster Corp. *v.* Watson (1902), 2 K.B. 717, it was held that wooden structures are works which a district surveyor is entitled to notice independently of the terms of the licence of the borough council. In Moran and Son, Ltd., *v.* Marsland (1909), 1 K.B. 744, his duties were held to extend to the supervision of a reservoir; and that a reservoir is a "building or structure." Where a district surveyor neglects or refuses to carry out his duties under the Act, a mandamus may be granted against him. See R. *v.* Redman (1889), 6 T.L. R. 9.

The fifth schedule to the Act of 1930 gives in detail the fees payable to district surveyors by the County Council, building owner or occupier in respect to the various duties they are charged with under the Act.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

Dry Rot.

[Reply to E. G. S., October 3.]

Sir,—A liquid generally known as a petrifying liquid, for hardening stone, is also one of the best treatments for dry rot, in similar application as corrosive sublimate, or tar.

Treatment.

Cleaning Oak Panelling.

[Reply to "Junior," September 26.]

Sir,—Apply and leave on a solution of oxalic acid for at least twenty-four hours, then wash it off with cold water. When dry it is ready for any treatment. John M. Fife.

Percentages.

Sir,—I propose to enter upon a contract for certain works upon a basis of prime cost plus a percentage for profit and establishment charges. What would be a fair figure for the latter, and is there a standard form of contract to answer to these conditions?

Employer.

Spillway.

[Reply to "Reader," October 17.]

Sir,—It is quite impossible for anyone to advise upon this matter from the particulars given, except to say that, given cheap ballast or suitable aggregate in the district, concrete would be the cheapest material to use But I should strongly advise your correspondent to consult a structural expert on the spot, as correspondence upon the subject might be extremely misleading.

Practice.

Contract Question.

Sir,—In a recent contract the specification described certain sanitary fittings as to be "supplied by the employer" (he being in the trade), and fixing and profit to be added. The fittings delivered include several which involve complications in fitting which I did not anticipate. For instance, the water-closets are of a special syphonic type, and the bath has involved certain difficulties in casing and tiling which I had no means of foreseeing. Have I a claim for extra payments on these items?

Builder.

Legal Definition of a "Flat."

[Reply to "Reader," October 10.]

Sir,—There is no doubt that in the local Act referred to by your correspondent there will be a definition of the word "flat." It is inconceivable that a Bill would be drafted leaving the definition of such items vague. It is also not likely that a floor of a house, whether self-contained or otherwise, and let direct by the landlord under a separate agreement, could be defined as anything but a flat. If sub-let, probably it would escape the Act, since the provision of a fire escape would be outside the powers of the main tenant.

Reason.

Maintenance.

Sir,—Under the maintenance clause of the contract for certain works, the final payment falls due when all defects which have appeared during that period have been made good. The employer has frequently delayed access to the works for the purpose of making good the defects, on the score of inconvenience. For how long would it be considered reasonable for an employer to refuse access for this purpose? One recognises that access cannot be always given immediately on demand, and that respect is due to the convenience of the employer.

Contractor.

Civil Engineering Contracting.

Sir,—I am a member of a firm of building contractors, with a good knowledge of general building contracting, and now desire to take up civil engineering and contracting. Having had very little experience of this work I should be glad of correspondents' suggestions as to the necessary knowledge and the best and quickest way of gaining such knowledge to enable me to carry out such work as reinforced concrete bridges, dock work, sewerage work, etc. Being in business I should be unable to take any course that would necessitate my leaving the provincial town in which I work.

Reader.

Roof Drainage Question.

[Reply to "Quære" and "Archineer," October 10.]

Sir,—It always seems to me that a great deal of money is wasted in drainage and rainwater goods by providing against the maximum downfall of rain that may be anticipated in this country. If a fall of ½ in. in one hour is provided against, this will cope with most of the heavy rains we are likely to experience, and in a greater downfall than this the overflowing of the gutters is but a drop in the ocean, occurring so seldom as to entail no damage to the fabric which would result from continual overflowing. Neither can it be expected to cause inconvenience to passers-by out in such a downpour.

Average.

Laying Zinc on Flat Terrace.

Sir,—Three and a half years ago I had a terrace covered with No. 14 zinc sheet. The terrace is of concrete and the zinc was laid on stout cardboard. This zinc has perished by oxidation on the under side. The cardboard is dry and intact, but there is a heavy deposit of a whitish powder—presumably zinc oxide—and the under side of the zinc is badly oxidised.

The climate is sub-tropical, and there is a little foot traffic on the terrace. Zinc flashings within 20 ft. of the terrace are as good as when fixed nine years ago. I have another large terrace which I had intended to cover in the same way, but I am now afraid to do this work as I fear it will perish in the same way.

R. E.

Cost of Building in the Isle of Man.

[Reply to "Reader," September 19.]

Sir,—My experience of school building in an island similarly placed, and of similar resources, may be of service to your correspondent. This building worked out at 1s. 7d. per foot cube, within the last few years. The high cost is attributable to slow workmanship, which is the general rule in small communities, and to the costs of trans-shipment and cartage of materials, as well as to dock and harbour dues. Your correspondent would do well to base his calculations upon a wide increase over current English rates, and not to allow himself to be misled by low labour wages.

Experience.

THE BUILDING TRADE

RECURRING DEFECTS: THEIR CAUSE, PREVENTION AND CURE.—XVI

By J. R. TAYLOR.

SOME ROADWAY DIFFICULTIES.

In connection with the road works carried out since the War ended I cannot recall any reference being made to one marked feature of their construction, reconstruction or improvement, that is adding to the difficulties of both architect and builder and to the cost of building.

I refer to the efforts made by the road engineer to carry out the work of forming new roads on the railway principle, both as regards direction and gradient. In many instances, and at many places, this has resulted in the new roads standing well above the natural surface levels of land on both sides of the road, while in other cases they are below these levels. This has the effect of carrying the road alternately through cuttings and on embankments, not, of course, in such a pronounced manner as in the case of railways, but having much the same underlying principles of construction and effects.

Before dealing with this matter there is one other feature to which it is desirable to draw attention. A certain road on the outskirts of London is an old one that from time to time has been strengthened to meet the ever-increasing calls made on it in regard to the amount and speed and weight of the traffic it has to carry. A long stretch of it travels through flat, level country of no great attractiveness that remained more or less undeveloped up to comparatively recent times. It is now lined on both sides by cottages and small villas, most of which appear to have been built speculatively, but in the case of some few with the assistance of an architect. Both architect and builder (possibly as the result of by-laws) appear to have taken the crown of the road as it existed as their datum, and in the case of houses having joisted and boarded ground floors, to have set them from nine inches to a foot above the crown. This generally results in the concrete mat being below general surface level with the attendant risks of damp, and/or dry or wet rot, but is so common that it would not be worth describing in this connection were it not for what happened later.

As traffic increased it was found necessary to strengthen the road from time to time, and the application of repeated coats of material gradually raised the crown until there was too much camber and the curbs were raised six inches. At the time I passed through, the road was receiving a new surface of nine inches of concrete on the existing surface, involving a further lifting of the curbs. As a consequence, practically all these properties now have their ground floors at some distance below the crown of the road, and, as they are built on a sub-soil of stiff clay, are placed at a greatly increased risk that could not be foreseen by either architect or builder.

This is by no means an extreme example of the sort of thing that is going on all over the country, but there is another method of road maintenance which is tending in the same direction, though much more slowly. Many roads of secondary importance receive an annual top dressing of coarse chipping on tar, or tar substitute. Rubber-shod vehicles do not always wear this new coat entirely through in the course of a year, with the result that the crown of the road is slowly lifted. With never too much money at his disposal, and facing a constant demand for better roads, the surveyor is loth to rip it out when the camber becomes excessive, and as in country districts the footpaths are generally much in need of improvement, he lifts the curbs instead. One result of this is that drives and footpaths that at one time had a little fall from the house to the front gate, and thus served, however inadequately, as surface-water drains, no longer function as such.

Building in a Hole.

What shall be said of the town-planner, the architect, and the engineer who so combine their united efforts that in developing an estate on a stiff clay subsoil they pen in the separate sites on all sides until the majority of the houses stand like cups in saucers on a crowded tea-tray? In the effort to arrive at a lay-out that looks attractive on paper this result is brought about more often than is generally known. It results in either an enormous increase in the first cost of the scheme, or great risk to the general stability of the properties and damage to the health of the inhabitants. The risk of the twin evils, damp and dry rot, is ever present in such cases, and many building authorities will eventually be called upon to foot a tremendous bill for remedial measures.

Town-Planning and Housing Schemes.

Town-planning may yet be said to be in its infancy, and it is very natural that there should be some mistakes. The trouble is that a mistake such as that described is much more serious than in work on a smaller scale. But town-planning has undoubtedly come to stay, and, although valuable lessons will undoubtedly be learnt from failures, yet in the best interests of all it is wiser to look round for some means of minimising the risks.

With this object I suggest that for any scheme of importance where the contemplated site is of an undulating nature it would be desirable that immediately after a careful survey and before anything further is done a contour model on a fairly large scale should be prepared. With this in front of them, the architect and the engineer should conjointly prepare the general lay-out of the roads, buildings, and drains. The original model or a duplicate of it should then have the roads formed on it, true to scale and level. In many cases, as soon as this has been done, the architect would at once see that he had such a difficult problem to deal with that the original scheme would have to be considerably modified or even entirely scrapped. I am aware that in some quarters the suggestion that anything of this sort is necessary will be received with derision. The short answer is that mistakes of a magnitude that will require the expenditure of hundreds of thousands, if not millions, of pounds in the aggregate have already been made in various parts of the country.

I would also like to see the great fund of experience of first costs as related to costs of maintenance that has moulded the methods of H.M. War Department and H.M. Office of Works brought to bear on the problem of housing. Neither of these departments would sanction the erection of two-story buildings on ordinary foundations at the same shallow depths on clay subsoils as on gravel. Yet this is being done in many parts of the country at grave risk and often with disastrous results. It is true that ill consequences do not always follow immediately, and in some very favourable cases are for a long time postponed. But at the best they are merely postponed. A new railway cutting, a new road, or even the extension of a sewage system, may help to upset the precarious balance afforded by impounded water below surface level, and the effects be as widespread and almost indistinguishable from those set up by coal-mining.

Taking this view, the authorities responsible for housing and town-planning would be very reluctant to build on clay on account of the added cost of foundations; where forced to do so, they would seek to modify their construction from the ground floor downwards and abandon hollow floors. As I have already pointed out, reinforced rafts or platforms offer a solution because dryness and stability can be combined with low first cost.

The point that above all others wants driving home is that the work below ground-floor level must be varied to meet the site conditions. On many sites this would imply preliminary surface drainage carried out considerably in advance of all other constructive works. After the buildings are erected it is often too late for surface drainage because the earth shrinkages that naturally follow would be the cause of foundation failures. Such failures are not infrequent where no intentional surface drainage has been put in hand because of the accidental and unforeseen diversions set up by other works, such as road and sewer construction.

On many sites for housing schemes laid out on town planning or garden village lines, the necessary delay that would accompany adequate preliminary surface drainage would be such as to be very annoying, and the architect responsible would be subjected to a good deal of pressure from authorities, the members of which are not as a rule well informed as to these difficulties. To some extent this would be overcome if the architect were consulted before the site purchase took place.

The alternative to site drainage on an extensive scale may sometimes be more cheaply found in waterproof construction up to ground-floor level. This implies a good deal more than merely putting in a horizontal damp course, and it is in respect to the neglect of the other necessary precautions that so many of the modern houses fail. Neither the concrete mat under the joisted floors nor the brickwork below damp course are in many instances watertight, and as a consequence the spread of dry rot has already been reported in connection with a number of housing schemes.

This trouble is not by any means confined to small housing schemes carried out by inexperienced officials. On the contrary the larger the scheme as a rule the greater are the difficulties presented by the site, and consequently the greater the liability to error. It also is the rule that the larger the scheme the greater is the tendency towards divided responsibility and control. In this divided responsibility lies one of the chief dangers, because it is very difficult to revise or correct a defect during the progress of the work. Decisions which to be effective should be given immediately, can only be arrived at after much cumbersome administrative machinery has been set in motion, and this leads to their remaining unsought. Delay means additional cost. Added cost is invariably questioned and further delay entailed. This leads to the adoption of temporary expedients rather than effective remedies.

(To be continued.)

Catalogue of British Scientific and Technical Books.

We have received a copy of the third edition of this catalogue, which includes sections on Architecture and Building Construction, Civil Engineering, Mechanics, etc. The volume is compiled by Daphne Shaw, and sold by Messrs. A. & F. Denny, Ltd., of 163a, Strand, W.C., for the British Science Guild.

TRADES TRAINING SCHOOLS

DISTRIBUTION OF PRIZES.

At the Carpenters' Hall, on Friday, October 17, in the presence of a large company, Professor Beresford Pite, M.A., F.R.I.B.A., presented the prizes to the students of the Trades Training Schools, whom he subsequently addressed. Mr. Louis Jacob, Master of the Carpenters' Company, occupied the chair, and among those present were the following:—Sir W. Goscombe John, R.A., Sir Stanford London, Sir Percy Shepherd, Sir Banister Fletcher, P.R.I.B.A. (Director of the Schools), Lt.-Col. A. C. Preston (Deputy Master), Col. R. J. Blackham, the Rev. S. V. Newson, and Messrs. Gilbert Christy, William J. Minn, S. J. Rose, H. D. Searles Wood, T. M. Pritchard, Stanley Grant, F. Adams Smith, Alfred Drury, R.A., Frederick Sutton, E. Guy Dawber, A.R.A., A. W. Burchall, A. F. Wildash, Gayford D. Minn, R. W. B. Buckland, S. Hewitt Pitt, Ion Beresford Pite, Arthur Bedford, George Parlby, Professor Elsey Smith, Arthur Keen, T. Harris Browne, Charles L. Hartwell, R.A., Alan W. Preston, Warden F. O. Keysell, and J. Hutton Freeman (Clerk to the Carpenters' Company).

Mr. F. Adams Smith, F.R.I.B.A, Chairman of the School Committee, in the course of his annual report, paid tribute to the work of their late Chairman, Mr. Frederick Sutton. The Schools, he continued, had had a very successful year. Some examples of work were on view in the Committee room, and showed the results achieved in the different trades represented in the Schools. The number of students enrolled on the opening evening was 194, and the number now was 421. Having referred to the loss which the Schools had suffered in the death of their old and respected member and Past Master, the late Mr. Percy Preston, the speaker went on to refer to the exhibits of the various trades schools at the recent Building Exhibition. Schools in London and different parts of the country were represented, and the competition was severe, but the Trades Training Schools received second prize for work exhibited.

Sir Banister Fletcher, Director of the Schools, then read his annual report on the work of the Session, 1929-1930, in the course of which he said the past session was most satisfactory, and they had the maximum number of students that they could accommodate, while, as usual, there were numerous applicants on waiting lists. The total attendance for the session was 15,450, with an average of 103.7 students per evening—a highly satisfactory record and a slight increase on the previous session. The great object of the Trades Training Schools of the Carpenters' Company and Associated City Companies, he continued, was the intensive training in the evening, under highly qualified instructors, of apprentices and others who were working in one or other of the building trades during the daytime. The Carpenters' Company had expended large sums on the upkeep of the Schools, and it was an achievement to be proud of that for the 37 years since its foundation the Company had steadfastly maintained the institution, the Associated City Companies gradually joining and lending their aid.

"Opportunity" was his text for the year, just as last year his slogan was "Be prepared." "There is a tide in the affairs of men which, taken at the flood, leads on to fortune"—thus did Shakespeare refer to the flowing tide of opportunity to which a man who aimed at success must set his sail and steer steadily on; thus did the promoters of the Trades Training Schools provide the opportunity to become perfect and practised in the various crafts which would lead them on to success in the great adventure of life. Seas might prove rough, winds might be adverse from time to time, but if they were properly equipped and ready to seize opportunity as it offered, they would ride the rough waves of life and fill the sails of their ship with the wind which would carry them successfully into a safe port. The Schools sought to train each student to work as a man, and not as a machine. It was true that it was the epoch of machinery, but it was equally true that it was the day when brain and hand must be trained to work together. Equality of opportunity had been a political cry for many years; and their Schools had supplied this equality of opportunity in practice for those who worked at the various building crafts. The City Guilds were living up in practice to their responsibilities. If all other organisations and societies would follow their example in this practical work of offering opportunities which made for equality, we should have such co-operation for good in this country as would overcome many of the evils which were rampant to-day. Last century was known as the "Wonderful Century," on account of the many scientific developments and inventions. This century would be known as the "Venturesome Century," on account of the fresh development of the human spirit which, greatly daring, sought to overcome all obstacles in air and earth and sea. He wondered how many of them had heard of that early Victorian book called "Smiles' Self-Help." Those Schools which were started in Queen Victoria's wonderful days, might be termed "Smiles' Self-Help in Actual Practice," and not only on the printed page. They learned there to help themselves, not by reading how to do it, but by personal work; and an ounce of practice was worth a pound of theory. We sometimes heard it said, as an apology for failure, that a man was the creature of his circumstances, but that was only true of a man without character, grit, force, energy, determination, ambition, or spirit, which was the vital spark of life and of work, which was the real life. The Schools aimed to turn out men who should be masters of their circumstances because they were masters of the craft they followed. He felt proud of their students, who, after their day's work, came long distances to improve themselves in their evenings instead of crowding at cinemas, or going to the dogs or the dirt track. He congratulated their students on having seized the opportunity for reaching to the higher heights in craftsmanship which were provided by the Trades Training Schools.

Professor Beresford Pite, after presenting the prizes, addressed the students. Theirs, he said, was the pleasure of work—of doing something, of handling and feeling it; of walking across the street and looking at it. Architects, too, had the pleasure of doing something, but they had to dream about it, to draw it and specify it. Craftsmen had the pleasure of erecting something on the face of the earth; they could not be deprived of their work, and they could not be paid for it. They had to put their thoughts into things and to make wood, brick and stone live with thought. Brick bonding was not laid only with grey mortar, but with the grey matter that lay in their brains. They had to put themselves into their work, and if they got as far as that they found themselves in the blessed company of all faithful craftsmen, at one with the men who drafted the stones of the Great Pyramid, who laid the brickwork in the vast Roman vaults, who wrought the stonework in our great mediæval cathedrals. Man's work lived beyond him—not merely for a time, but for eternity. That spirit, idea, way of work or life or thought, should animate the commonest thing; no work was too mean to be a work of art. They should make their work better than they were paid for. "Whosoever shall compel thee to go a mile, go with him twain," quoted the speaker. He noticed that there was no machinery in their shops. Underlying all possible developments of machinery in relation to the building crafts were the handicrafts. Machinery was simply suited to mass production, but the cultivation of the handicrafts was vital to any trade, no matter what machinery might duplicate its after results.

Mr. H. D. Searles Wood proposed a vote of thanks to Professor Pite, which was seconded by Mr. A. W. Burchall, who offered a few words of sympathy and advice to the unsuccessful students, and carried with acclamation.

Professor Pite thereupon advised unsuccessful students to cultivate a hobby. It was advisable, he said, to have two strings to one's bow.

Mr. C. A. Hindley then proposed a vote of thanks to the Chairman, which was seconded by the Rev. S. V. Newson, and the Chairman briefly replied.

SMOKE ABATEMENT

The Royal Sanitary Institute has arranged a course of lectures on Smoke Abatement for sanitary and smoke inspectors, in view of the efforts now being made by local authorities to standardise the methods of dealing with smoke nuisances. The opening lecture was given by Sir Lawrence Chubb, honorary advisory secretary of the National Smoke Abatement Society.

After describing the powers given to local authorities by the Public Health (Smoke Abatement) Act, 1926, the lecturer said that it was a matter for regret that up to the present so little advantage had been taken of those powers. That was not altogether the fault of the councils. The Act purported to enable by-laws to be made regulating the emission of smoke of any colour, density, or content, but up to the present the Ministry of Health had not been disposed to consider the control of any smoke that was not actually black. Although it was no doubt desirable to standardise practice throughout the country, it had to be remembered that the emission of quantities of black smoke had been illegal ever since the Public Health Act of 1875 passed into law. By-laws dealing with such smoke were, therefore, of secondary importance. What was urgently needed was a by-law allowing councils to prevent the emission of dense volumes of opaque smoke, which often did far more harm to health and property than occasional outbursts of really black smoke. The Smoke Abatement Act purported to bring under control noxious smoke regardless of colour, but such smoke could not be effectively dealt with until the by-laws which the Act authorised had, in fact, been formulated by the councils and approved by the Ministry of Health. No real progress in the prevention of atmospheric pollution was likely until such by-laws were available.

South-Eastern Architects.

We have received a copy of the prospectus of the Year Book for 1931 of the South-Eastern Society of Architects (in alliance with the Royal Institute of British Architects). This Year Book is to consist of a three-day desk diary, illustrations and, we learn, interesting letterpress. Further details of the publication are obtainable from the Hon. Gen. Secretary, South-Eastern Society of Architects, St. Moritz, The Upper Avenue, Eastbourne.

Corsican Pine.

We have received from the Department of Scientific and Industrial Research a copy of Bulletin No. 6 ("The Timber of Corsican Pine"), in a foreword to which Mr. R. S. Pearson, Director of Forest Products Research, points out that the Forestry Commission in Great Britain is engaged on reafforestation on a large scale, and have selected, amongst other conifers, Corsican pine, *Pinus Laricio* Poir. The timber is on the market, only in very small quantities, chiefly as pit-props, so that its properties are not well known, while only very general information is available as to the class of timber produced under different soil and climatic conditions. The present report gives the results of an initial series of investigations into the structure of the wood, its seasoning qualities, strength, woodworking properties, and its uses, present and prospective. Copies of the publication may be obtained, price 2s. 6d. net, from H.M. Stationery Office and the usual agents.

CAST CONCRETE

The second annual meeting and luncheon of the Cast Concrete Products Association was held at Olympia on September 29, the Chairman being Major F. G. P. Gedge. The latter, in taking a general survey of the industry, remarked it was observed that the demand for concrete products was growing, and that there was, moreover, a definite tendency to recognise the necessity of obtaining all such goods precast.

After the luncheon, at which Dr. R. E. Stradling, Director of Building Research, Building Research Station, Garston, addressed the members on research, the meeting was continued and the Council's proposals for a scheme of co-operative research were considered. The need for a research scheme to be undertaken by the industry had been urged when the Association was first mooted, and finds mention in the published objects of the Association. It was submitted that investigations of concrete products must aim at relating the qualities of the manufactured article to the properties of the materials used as ingredients and to the processes employed.

Dr. Stradling, in his address, said that compared with some branches of building and the manufacture of certain building materials, the making of cast concrete products, as we understood them to-day, was a new industry. How was that industry going to develop? He supposed that the two outstanding difficulties in concrete work, and particularly in certain branches of cast concrete products, were crazing and efflorescence, and he would like, just for two or three minutes, to try and analyse, if he could, some of the more outstanding factors which appeared to be behind these difficulties.

Moisture Effects and Crazing.

We could look upon concrete as made up of three distinct parts—cement, water and aggregate, and all three of these things were important. Every time one added water to cement one was carrying out a chemical experiment. One was actually bringing two materials together which would inter-act and form different chemical compounds from the ones with which one started. In addition to this, not only were they different chemically, but they were in a different physical state. It was rather interesting, as one went round looking into various phases of industry, especially on the building side, to find that wherever one went, in almost every industry, there seemed to be one outstanding difficulty at the present time, and that was to understand the relationship of water and solid material when one brought them into contact. It was not sufficiently known what the forces were that were brought into play when these two types of material came together. The important point was that certain groups of building materials had their properties seriously affected by the amount of water present in them. As regarded the behaviour of cement products, there was a first shrinkage movement during curing and then even after years the mass would expand and contract in size, depending upon the amount of moisture present. The problem of crazing and its control was the problem of the control of these movements due to moisture change. The forces brought into play by these moisture changes were very big, and this could be realised if the case of reinforced concrete was considered. In some experiments at the Building Research Station some small beams 36 in. long had been made. These beams were reinforced by steel bars running along the central axis of the beam and projecting at each end. Accurate measurements of the length of these steel bars were made. As the concrete hardened and shrinkage took place, the steel bars also shortened in length due to the adhering concrete pulling them with it. Movements corresponding to stresses of 15,000 lb./sq. in. were measured.

The curing of concrete was the name given to the practical means adopted to control these moisture changes. Apparently, steam curing was very successful at times, but, at present, one did not know what this meant scientifically. Some recent work in Canada seemed to point to this process producing different compounds from those produced by normal ageing.

Efflorescence.

There was another thing which was troublesome with cast concrete products, and this was efflorescence. With most of the concrete products that were disfigured by fading and the like, the deposit that was worrying was lime, and one wanted to find a means of getting rid of that. He believed, said the lecturer, that it could be got rid of, and fairly simply. He thought the work on pozzolanas the Building Research Station were doing now in co-operation with the cement manufacturers, and one or two other firms, would ultimately lead to a way out of this particular difficulty, but they had to learn how to incorporate a material of this kind into the products which they were making, and how to adjust the work so that other troubles were not introduced with the introduction of pozzolanas.

Grading.

In considering the aggregate, the third constituent of concrete, he did not suppose there was any need to emphasise the absolutely essential nature of the control of grading. One could get two products with exactly the same ratio of cement to aggregate, and one could be broken in the hands, and the other would take a high stress, and this could be done just by varying the grading. A great many of the very successful products put on the market for hard-floor finishes and that kind of thing had, as the secret behind them, proper grading and correct handling. He was afraid that grading had not been a very serious study in England. We had to look to America and the Continent for some of the best work that had been done on the subject, but the results of that work were available, and could be sorted out in terms of British materials. A proper study of grading was essential in their industry.

At a meeting of the Council, held on October 17, the following officers were elected for the ensuing year:—Chairman: Mr. H. W. Jenks; Vice-Chairman: Mr. W. R. E. Honner; Executive Committee: Chairman, Vice-Chairman, Mr. G. B. Brader, Mr. G. W. Butchard, Mr. E. L. Cotterell, Major F. G. P. Gedge, Mr. R. P. Girling.

FILAMENT ELECTRIC LAMPS.

The 1930 revised edition of the British Standard Lamp Specification No. 161 again marks a very considerable advance over the edition it supersedes (that of December, 1928). The rapid improvement in manufacture in the last two years enables the specification to provide that lamps shall give a better light output without reduction in the minimum average life (1,000 hours). Gas-filled lamps up to and including the 100-watt size are now standard only with internally frosted bulbs, the light absorption being so small that the figures for the light output remain the same whether the bulbs are internally frosted or clear. It is hoped that the standardisation of the inside frosted lamp will minimise the use of clear bulb lamps in positions where the glare of the naked filament is harmful. The British Standard Lamp Specification is in almost universal use in Great Britain, and it is interesting to note that it is adopted as standard in many countries outside England, a proof of its great value in assisting buyers to secure a really satisfactory article. Copies of this Specification, No. 161—1930, may be obtained from the Publications Department, British Engineering Standards Association, 28, Victoria-street, S.W.1, price 2s. 2d. post free.

THE SCOTTISH HOUSING ACT

The Department of Health for Scotland has recently issued an Explanatory Memorandum of the Housing (Scotland) Act, 1930, to assist local authorities in putting its provisions into force. In Scotland the "principal" Act is the Housing (Scotland) Act, 1925, just as in this country the Housing Act of 1925 still remains the "principal" Act, and both these statutes have been amended by the Acts of 1930.

The new legislation in the two countries follows very much the same lines, and the Memorandum explains that Part I of the new Scottish Act, which deals with Clearance and Improvement Areas, takes the place to a very considerable extent, of Part II of the Housing (Scotland) Act, 1925, whilst Part II deals with individual houses and amends Part I of that Act, and Part III deals with finance, and Part IV contains general and miscellaneous provisions.

We have not the new Scottish Act before us to compare with the Housing Act, 1930, but in some respects the Scottish Memorandum appears to us even more clearly worded and more explicit that its English counterpart, and we give two examples. For instance, in connection with Clearance Areas, this passage occurs in italics: "If the local authority wish to regulate (otherwise than in accordance with their ordinary powers) the development, lay-out and use of a clearance area, they will not be able to do so merely by making a clearance order. To secure such control the local authority will require to proceed by way of purchase." This terse sentence, we believe, would apply equally to the English Act. And again, in connection with Improvement Areas, the following short sentence appears equally applicable to either Act. "An improvement area differs from a clearance area in respect that the defective conditions in the former can be remedied without the demolition of all the buildings therein." Another point seems more emphasised in this Memorandum than it is in the Memorandum referring to the English Act, and that is, that under Section 6 of the Scottish Act (and this applies also to Section 7 of the English Act), the conditions precedent to an area being declared an Improvement Area are two-fold. Thus the Scottish Memorandum states specifically: "It is important to observe that two sets of conditions must exist, namely, that there must be (1) houses that in themselves are defective, *and* (2) houses that are overcrowded or bad because of environment conditions." This can be gathered from the English Act, but the Memorandum does not indicate it in such clear terms as the above.

Again, the Scottish Circular, under a special paragraph, draws attention to "The Control of Overcrowding." It appears from this Memorandum that the Scottish Act contains very similar provisions to those in the English Act on this question, but the English Memorandum, although it mentions the provisions in paragraph 4, does not draw attention to them so clearly. We make these observations because we think those called upon to put into force the provisions of the English Act will find the Scottish Memorandum also suggestive.

The Scottish Memorandum closes with an appeal to local authorities to put the provisions of the Act into force, and not to compel the Department to act under those sections of the Act which give it powers to compel action on the part of the local authorities, or to act on their default.

Alport Height, Derbyshire.

The National Trust has been able to acquire, by gift, nine acres of the well-known upland in Derbyshire, Alport Height. This hill is the highest point in the southern half of the county.

NEW BUILDINGS IN LONDON

Addiscombe.—Additions.—Messrs. Charles E. Head, Ltd., 112a, Wellesley-road, Croydon, are to carry out alterations to the "Builders' Arms" public-house, in Leslie Park-road. Mr. C. R. Riches, 5, Church-road, Croydon, is the architect.

Aldgate.—Extensions.—It is proposed to erect extensions to the Sir John Cass Institute, Duke-street, upon a site north of the present buildings. Mr. V. O. Rees is the architect.

Battersea.—Bank.—Messrs. Lloyds Bank, Ltd., are to erect bank premises on a site on the north side of Battersea Rise at its junction with St. John's-road. Mr. Oliver Hill, F.R.I.B.A., architect, 9, Hanover-square, W.1, has prepared the plans. No building contract has yet been placed.

Bayswater.—Alterations.—Messrs. Shepherd and Thomerson, Queen's-road, W.2, have prepared plans for the carrying out of alterations and additions to 36, Westbourne-terrace, W.2.

Croydon.—Warehouse.—New warehouse is being erected in Aberdeen-road for Messrs. K. E. Wood and C. H. Rose, 20, The Broadway, Woking. Plans by Messrs. Hookers and Rogers, High-street, Croydon. The contract has been let to Messrs. C. S. Sedgwick, Ltd., Frant-road, Thornton Heath.

Ebury Bridge.—Building.—The Westminster City Council has accepted the estimate at £20,800 of Mr. Albert Monk, of Lower Edmonton, N.9, for the erection of new buildings for a tuberculosis dispensary and maternity and child welfare centre with five flats over.

Edmonton. — School. — The tender of Messrs. J. Stewart & Sons (Tottenham), Ltd., 174, West Green-road, N.15, have been recommended by the Middlesex C.C. for the erection of a new county school in Cambridge-road. The architect is Mr. W. T. Curtis, F.R.I.B.A., County Architect, 10, Great George-street, S.W.1. The price for the work is £50,175.

Finchley. — Church. — A new Non-Conformist church is being erected in Creighton-avenue. The contractors are Messrs. Allen Fairhead and Co., Ltd., Sydney-road, Enfield, N. The architects are Messrs. George Baines and Son, 121, Victoria-street, S.W.1.

Finsbury.—Rebuilding.—The "Pied Bull" public-house, at 1, Liverpool-road, is to be rebuilt. Plans have been prepared by the staff of Messrs. Hoare and Co., Ltd., of St. Katherine's Way, E.1. The estimated cost is £12,000.

Finsbury.—Alterations.—To be carried out at 32, Graham-street, Finsbury, for the British Drug Houses, Ltd.

Fleet-street.—Premises.—Messrs. Trollope and Colls, of 5, Coleman-street, E.C., have secured the superstructure contract for the new *Daily Express* headquarters at the corner of Fleet-street and Shoe-lane. The steel contract is with Messrs. Moreland, Hayne and Co., Ltd., 30, Goswell-road, E.C.1. Messrs. Herbert O. Ellis and Clarke, 3, Old Queen-street, S.W.1, prepared the plans, and the consulting engineer is Sir Evan Owen Williams, K.B.E., 5, St. George's-road, S.W.1.

Fulham.—Conversion.—The London Co-operative Society, of 54, Maryland-street, E.15, have purchased 111-115, Wandsworth Bridge-road for conversion into a store. Plans by Mr. A. Hulbert, Works Manager, Whitta-road, Manor Park, E.12.

Fulham.—Premises.—The application by the Borough Surveyor for provisional consent to the revised building line in Fulham-road and Shottendane-road on the site of the Swan Brewery has been approved by the Housing Committee of the Borough Council.

Fulham.—Buildings.—The Borough Council recommend application for the formal consent of the L.C.C. to the erection of buildings upon the sites of Nos. 665-683, Fulham-road.

Fulham.—Garages.—Mr. W. Doddington, 262, Earl's Court-road, S.W.5, has submitted an application to the Borough Council for consent to the erection of lock-up garages on a site at 146, Lillie-road, abutting upon Mulgrave-road and Lillie-road.

Greenwich. — Additions. — Mr. A. C. Russell, 13, Basinghall-street, E.C.2, has prepared plans for additions to 6-14, Blackheath-road, Greenwich, for Messrs. Merritt & Hatcher, printers, 33, Moor-lane, E.C.2.

Hackney.—Stores. — Mr. A. Hulbert, works manager, Whitta-road, Manor Park, E.12, is preparing plans for a store at 20-22, Chatsworth-road, for the London Co-operative Society, of 54, Maryland-street, E.15.

Hackney.—Baths.—The B.C. recommend the erection in Shacklewell-lane of a branch slipper bath, at an estimated cost of £10,227. The plans are by the Borough Surveyor. Tenders are shortly to be invited.

Hackney.—Baths.—Tenders are presently to be invited for the erection of a branch bath in Englefield-road for the B.C. The Borough Surveyor has prepared the plans.

Hammersmith-road. — Additions. — For erection of an addition to Cadby Hall, Messrs. Holman & Goodrham, architects, 6, King's Bench-walk, E.C.4, have prepared plans on behalf of Messrs. J. Lyons & Co., Ltd.

Hampstead.—Rebuilding.—Plans are being prepared for the rebuilding of the "Railway Tavern," at South End Green. The architect is Mr. W. S. Trent, 6, Broad Street-place, E.C.2. The scheme is estimated to cost £7,500.

Harley-street.—Buildings.—A new block of offices is to be erected at No. 40, Harley-street, W.1, for the Metropolitan Railway Co. Plans by the company's architect, Mr. C. W. Clark, A.R.I.B.A., Baker-street Station, N.W.1.

Hendon.—Extensions.—For extensions to the Hendon U.D.C.'s town hall, the engineer and surveyor, Mr. A. O. Knight, M.I.C.E., has prepared plans and now invites tenders.

Hornsey.—Store.—The London Co-operative Society, Ltd., of 54, Maryland-street, Stratford, E.15, are to establish a store at 51, Turnpike-lane. Plans by Mr. A. Hulbert, of Whitta-road, Manor Park, E.12 (Works Manager).

Hoxton.—Bank.—Messrs. L. H. and R. Roberts, of 144, Lower Clapton-road, London, E.5, have secured the contract for erecting new branch premises for the Westminster Bank, Ltd., in New North-road. Plans by Messrs. Gunton and Gunton, Empire House, St. Martin's-le-Grand, E.C.

Hoxton.—Premises.—Application has been made to the L.C.C. by Messrs. L. G. Mouchel & Partners, Ltd., 38, Victoria-street, S.W.1, in connection with the erection of a building at the premises of Messrs. Beresford & Hicks, Ivy-street, Hoxton.

Islington.—Rebuilding.—Messrs. H. Sabey and Co., Ltd., 7, South Wharf, W.2, have cleared the site of 31, Pentonville-road, preparatory to rebuilding. The architects are Messrs. Gunton and Gunton, Empire House, St. Martin's-le-Grand, E.C.

Kilburn.—Conversion.—The London Co-operative Society, Ltd., 54, Maryland-street, Stratford, E.15, purchased 34a, 36 and 36a, High-road, for conversion into a departmental store. Plans by Mr. A. Hulbert, Works Manager, Whitta-road, Manor Park, E.12.

Little James-street. — Rebuilding. — The "White Lion" public-house, at No. 10, is to be rebuilt for Messrs. Watney, Combe, Reid and Co., Ltd., Stag Brewery, S.W.1. Plans by Mr. A. W. Blomfield, company's architect. The scheme is estimated to cost £6,000.

Marble Arch.—Subway.—The Westminster City Council have recommended the construction of a subway for foot passengers in continuation of the subway to be constructed by the Central London Railway Co., at Marble Arch, from the north-east corner of Park-lane to Cumberland-gate, Hyde Park, at an estimated cost of £10,500.

Mare-street.—Chapel.—For the erection of a chapel at the rear of St. Joseph's Hospice, Mare-street, and adjoining Cambridge Lodge Villas, an application has been submitted to the Hackney B.C. by the Mother Superior.

New Bond-street.—Premises.—Mr. J. J. Joass, F.R.I.B.A., architect, 40, St. James's-place, S.W.1, has prepared plans for new premises at 17 and 18, New Bond-street, and 11 and 12, Clifford-street, W.1. The builders are Messrs. Higgs & Hill, Ltd., of Crown Works, South Lambeth-road, S.W.8.

Piccadilly.—Reconstruction.—Mr. Septimus Warwick, F.R.I.B.A., of 2, Cockspur-street, S.W.1, is the architect for the reconstruction of the Devonshire Club, in St. James's-street, Piccadilly.

St. Marylebone.—Rebuilding.—Premises at the corner of Devonshire-street and High-street are being demolished preparatory to rebuilding. The promoters are the Realty Trust, Ltd., 20, St. James's-square, S.W.1.

Southwark.—Premises.—New premises are to be erected at the corner of Barbel-street and Westminster Bridge-road for the Southwark Catholic Rescue Society. The building contract has been let to Mr. A. Monk, Lower Edmonton, N.9. Plans were prepared by Mr. J. O. Hughes, 16, Duckson-road, Eltham, S.E.9.

Stepney. — Reconstruction. — Mr. A. G. Moulton, architect and surveyor, 276, Commercial-road, E.1, has prepared plans for the reconstruction of 175, Commercial-road, E. Messrs. Silcock & Sons, 160, Cannon-street-road, E.1, are the builders.

Stoke Newington. — Shops. — Messrs. T. Jay Evans & Son, of 120, Victoria-street, S.W.1, are the architects for shop premises at Nos. 230-240, High-street, Stoke Newington.

Teddington.—Additions.—H.M.O.W. are inviting tenders for the erection of additions to the engineering building at the National Physical Laboratory.

Tottenham.—Stores.—No. 9, Cambridge-road, and 2 and 4, Compton-crescent, are to be converted into stores for the London Co-operative Society, of 54, Maryland-street, E.15. Plans by Mr. A. Hulbert, Works Manager, Whitta-road, Manor Park, E.12.

Twickenham.—Stand.—The Rugby Football Association are to demolish the present west stand at the Twickenham Ground, and to erect a new stand to accommodate 12,250. Plans are by Messrs. Kennedy and Donkin, Broadway-court, S.W., and Messrs. Humphreys, of Knightsbridge, S.W.1, are the builders.

Walthamstow.—Extensions.—The branch premises of Lloyds Bank, at Church Hill, are to be extended.

Wandsworth.—Flats.—The B.C. recommend that the tender of Messrs. E. Clarke & Sons, at £20,280 5s., be accepted for 36 flats on the site in Garrett-lane, adjoining Streatham Cemetery. Mr. G. L. Elkington, A.R.I.B.A., who has prepared the preliminary plans in connection with the scheme, is to be retained as the Council's architect for the scheme.

Wembley.—Remodelling.—The L.M. and S. Railway Co. are considering a scheme for the remodelling of the frontage of Wembley Station. Plans will be prepared by the company's architect at Euston, N.W.1.

Westminster.—Building.—Mr. E. F. Tomlins, F.R.I.B.A., 74, Tufton-street, S.W.1, is the architect for the erection of new premises on a site abutting on Marsham-street, Romney-street, Bennett's-yard and Tufton-street, S.W.1.

Wimbledon.—Building.—The B.C. has received an application from Messrs. R. J. & J. S. Thomson, architects, 49, Hill-road, S.W.19, on behalf of Mr. W. H. Porter, of Wimbledon, for consent to erect a proposed building in Hartfield-road.

Wimbledon.—Houses.—Nine houses are to be built in Faraday-road, for the Corporation, to the plans of the Borough Engineer and Surveyor.

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Accrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Aldershot	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Alfreton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Alnwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Altrincham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ashford (Kent)	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ashington	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ashton-under-Lyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Aylsham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barnstaple	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barrow-in-Furness	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Barry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Birmingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bishop Auckland	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Blackburn	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Blackpool	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bognor Regis	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bolton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bradford-on-Avon	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Braintree	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bridgwater	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bridlington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bromsgrove	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bromyard	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Bungay	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Burnley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Buxton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Cardiff	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Carlisle	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chatham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Chelmsford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cheltenham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chesterfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Chorley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cirencester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Clacton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cranbrook	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Darlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Deal	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Denbigh	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Derby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Devizes	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Dewsbury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Doncaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Dorchester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Dorking	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Dovercourt	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Driffield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Droitwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon. Val.)	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ely	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Exeter	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Exmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Fakenham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Felixstowe	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Frome	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Glossop	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Gosport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grantham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Great Yarmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½	1/0½
Grimsby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Guildford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Halifax	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harpenden	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Harrogate	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hartlepools	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Harwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hatfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hednesford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hereford	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Herne Bay	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hoik	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Huddersfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hull	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hunstanton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Huntingdon	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Isle of Wight	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
King's Lynn	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lancaster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Leeds	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leicester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leighton Buzzard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Lichfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lincoln	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Littlehampton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Liverpool	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/3½
Llandudno	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Llanelly	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
London:								
12 m. radius	1/8½	1/8½	1/8½	1/8½*	1/8½	1/8½	1/7½	1/3½
12-15 m. radius	1/8	1/8	1/8	1/8*	1/8	1/8	1/7	1/3
Loughborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Lowestoft	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Luton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Macclesfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Maidstone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Malvern	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Mansfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Margate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Market Harb'rough	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Matlock	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Melton Constable	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Melton Mowbray	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Merthyr Tydfil	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Middlesbrough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newark	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Newbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newcastle-on-Tyne	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Newcastle-ur-Lyme	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
New Forest	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Northampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Nottingham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Nuneaton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Oxford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Paignton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Pontypridd	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ramsgate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Reading	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Redcar	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Redditch	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Reigate	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Retford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ripon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rochdale	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Rochester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Saffron Walden	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sawbridgeworth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Saxmundham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Scarborough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Sevenoaks	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sheffield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Southampton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southend-on-Sea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
South Shields	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stevenage	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Stockport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stockton-on-Tees	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stoke-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stowmarket	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Stratford-on-Avon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sunderland	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swaffham	1/2	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Swansea	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/0½
Tamworth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Taunton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Thetford	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Totnes	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Trowbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Uttoxeter	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wakefield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Walsden	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warminster	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Warrington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warwick	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wells (Norfolk)	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Weston-sup-Mare	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Weymouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Whitby	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wigan	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wisbech	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wolverhampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Woodbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Worthing	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wrexham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wycombe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wymondham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
York	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, is 1/11½ per hour

For Building Trade wages in Scotland, see page 721

NEW CINEMAS

Bakewell.—The Holmewood Picture Palace Company, Ltd., are proposing the erection of a new picture palace on a site on Market-street, Bakewell. Plans are being prepared by Messrs. Wilcockson and Cutts, architects and surveyors, 12, Saltergate, Chesterfield.

Deal.—Messrs. Gloeds, chartered quantity surveyors, whose address is 105, Regent-street, London, W.1, inform us that the scheme for erecting a cinema on the north side of Queen-street, Deal, has not yet got to the stage where tenders will be invited.

Deptford.—The B.C. has consented to an application to deviate from the approved plan in connection with a proposed addition at the Deptford Electric Palace, No. 197, High-street, to abut upon Hyde-street. The owners are the Deptford Electric Palace, Ltd., and the application was made by Mr. G. T. Harman, A.R.I.B.A., 165, Rushey-green, S.E.6.

Dewsbury. — Mr. Robert Cromie, F.R.I.B.A., 35, Baker-street, W.1, has prepared plans for a cinema intended for a site in Crackenedge-lane, which has been acquired by a newly formed company known as The Playhouse (Dewsbury), Ltd. The new house, to be known as The Playhouse, will seat 1,700 people.

Great Windmill-street.—Messrs. Pitcher Construction Co., Ltd., 57, Ashburton-grove, N.7, have obtained a contract for the reconstruction of the Palais de Luxe cinema, for the Windmill Theatres, Ltd. The architect is Mr. F. Edward Jones, F.R.I.B.A., Gloster-mansions, Cambridge Circus, W.C.2.

Normanton, Yorks.—Contractors willing to tender for the whole of the various works required in the erection of the "Majestic" cinema, which is to seat 900, are invited to forward their names at once to the architects, Messrs. Fred Mitchell and Sons, 9, Upper Fountaine-street, Albion-street, Leeds.

Tooting.—Work is to start immediately upon the erection of the new Bernstein picture theatre. Accommodation is to be provided for 4,000, and the estimated cost is £100,000. Mr. Cecil Masey, F.R.I.B.A., is the architect. The builders for the superstructure are Messrs. Bovis (1929), Ltd., 43, Upper Berkeley-street, W.1.

PATENTS

APPLICATIONS PUBLISHED.

332,719.—H. L. Tucker: Composition flooring.

333,567.—Hall & Kay, Ltd., D. Hall, P. Kay and S. Hall: Window blinds and casings therefor.

333,595.—Bessler Disappearing Stairway Co.: Stairways.

333,535.—D. de Ros: Preservation of natural and artificial building-materials.

333,541.—A. F. Jenkins: Paint-spraying apparatus.

313,122.—A. F. Jenkins: Paint-spraying apparatus.

333,640.—Dr. F. Sitz: Pole scaffolding.

333,671.—J. B. Blakey and Blagg & Johnson, Ltd.: Plasterers' metallic angle bead for walls.

333,689.—W. D. Goodfellow: Floor cramps.

333,851.—E. S. Grinyer and S. Hart: Method of spraying surfaces with paint, for use in sign-writing and the like.

Note.—Period for opposition expires October 27, 1930.

Liverpool City Engineer.

It is recommended to Liverpool City Council that Mr. Thomas Molyneux, M.B.E., M.I.Mech.E., at present Deputy City Engineer, be appointed City Engineer as from December 1, 1930. This is in place of Mr. T. Peirson Frank, recently appointed Chief Engineer to the L.C.C.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders, and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S. Engineer E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

OCTOBER 27.

Barnsley.—Extensions.—To burton-rd. school, for E.C. Dyson, Cawthorne & Coles, architects, 10, Regent-st.

Belfast.—Convenience.—Underground public sanitary convenience in Shaftesbury-sq., for C.B. City Surveyor, Room 91. Dep. £2 2s.

Bromley.—Wall.—Taking down and rebuilding brick and flint boundary wall at St. Mary's Church and Vicarage, College-rd., for T.C. B.E.

Burton-upon-Trent.—Shelter.—Shelter, footbridge, gates and fencing at Riverside Walk, Stapenhill, for C.B. G. T. Lynam, B.E. and S.

Ealing.—School.—Erection of Boston-rd. school, Hanwell, W.7, for T.C. W. R. Hicks, B.E. Dep. £2 2s.

Glasgow. — Works. — Ironmongery work at Drumoyne school, Govan, and Springfield-rd. advanced central school, Bridgeton, for T.C. D. Stenhouse, T.C. Dep. £1 1s.

Maltby.—Installation.—Electric light and bell installation, at Secondary school, for West Riding E.C. Education Officer, County Hall, Wakefield.

Near Sheffield.—Building.—Caretaker's house; boundary walls and railings, and cycle hut and store, at Chelmsford Mining and Technical Institute, Dinnington, near Sheffield, for West Riding C.C. Education Officer, County Hall, Wakefield.

Surrey. — Demolition. — Of two semi-detached houses forming one block, known as 30 and 32, Kew-rd., Richmond, for C.C. C.E., County Hall, Kingston-on-Thames.

Worksop.—Wiring.—For electricity of 50 houses at North Carlton, near Worksop, for R.D.C. C. I. Ingham, clerk.

OCTOBER 28.

Belfast.—Building.—Additional lavatory accommodation at Falls-rd. public baths; Peter's-hill public baths; Templemore-av. public baths; Ormeau-av. public baths, for C.B. City S., Room 91. Dep. £1 1s.

Belfast.—Painting.—At Falls-rd., Peter's-hill and Ligoniel public baths, for C.B. City S., Room 91. Dep. £1 1s.

Carlogie.—Demolition.—Of Carlogie Cottage, Kincardine O'Neil. Walker & Duncan, C.E., 3, Golden sq., Aberdeen.

Dublin.—Heating.—Electric lighting and heating of 90 houses in Marrowbone-lane housing scheme, for Corporation. City Architect, Exchange-buildings. Dep. £1 1s.

Dundee.—Exchange.—Telephone exchange, for H.M.O.W. Architect, H.M. Office of Works, 122, George-st., Edinburgh.

Middlesbrough.—Conversion.—Of Acklam Hall into secondary school for boys, for C.B. S. E. Burgess, L.R.I.B.A., Municipal-buildings.

Plymouth.—Cottages.—4 cottages, in 2 blocks of 2, at Blackadon Mental Hospital, for T.C. J. Wiberley, City Engineer and Architect, Sun-buildings. Dep. £2 2s.

Stourport. — Houses. — Six non-parlour type at Prospect-rd., for U.D.C. L. H. Poole, surveyor, 58, Mitton-st.

Stretford. — Washhouse. — In Trafford-pk., for U.D.C. Percy Howard, A.R.I.B.A., 88, Mosley-st., Manchester. Dep. £1.

Tavistock.—Houses.—4, at Princetown, for R.D.C. T. H. Harris, architect.

Tipton.—Houses.—10 3-bedroom parlour type, 49 3-bedroom non-parlour type, and 40 2-bedroom non-parlour type houses at Park-lane West, for U.D.C. H. N. Woodard, E. and S. Dep. £2 2s.

OCTOBER 29.

Bury.—Alterations.—To urinal in Victoria-st., for Corporation. B.E.

Ipswich.—Demolition.—Of Ipswich Prison at rear of County Hall, Grimwade-st. and the Rope-walk, for C.B. E. McLanchlan, Borough Surveyor and Water Engineer.

Knaresborough.—Extensions.—Alterations and extensions to Elephant and Castle Hotel, for L. B. Steel, proprietor. C. F. Burton, F.R.I.B.A., chartered architect, George-st., West Hartlepool. Dep. £2 2s.

Loughborough.—Cottages.—48 non-parlour cottages on Shelthorpe and Ling Farm estates, for Corporation. Barry Parker, F.R.I.B.A., Norton-way, Letchworth, Hertfordshire. Dep. £1 1s.

OCTOBER 30.

Glasgow.—Houses.—322, at Netherton, for T.C. David Stenhouse, T.C.

Twickenham.—Fencing.—Pavilion and fencing at public recreation ground known as Kneller-gardens, for T.C. Gilbert R. King, B.E. and S. Dep. £2 2s.

***Watford.** — Additions. — To Boys' Grammar school. Clerk to the Governors, Education Office, 7, Church-st. Dep. £2.

OCTOBER 31.

Cranbrook, Kent.—Adaptations and additions to Osborne Lodge. Director of Education, Springfield, Maidstone. Dep. £2 2s.

Faversham.—Installation.—Of electric light in 70 houses at Preston housing site, for Corporation. S. P. Andrews, B.S.

Hove.—School.—The Education Committee invite tenders for the erection of two departments of a new elementary school on the Knoll estate, Old Shoreham-rd., Hove. H. P. Barwood, Secy., Education Offices, Third-av., Hove, Sussex. Dep. £5 5s.

Kent. — Additions. — To Nonington-Aylesham Central School, for the E.C. Director of Education Springfield, Maidstone. Dep. £2 2s.

Leeds.—Buildings.—Concrete foundations in connection with erection of additional civic buildings at Calverley-st., for T.C. City E.

London.—Rewiring.—For electric lighting and power, at Queen Anne's-chambs., Broadway, Westminster, S.W., for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-st., S.W.1. Dep. £1 1s.

Near Ilkley.—Tank.—Water tank and water tank house at Middleton-in-Wharfedale Sanatorium, near Ilkley, for West Riding C.C. West Riding Architect, County Hall, Wakefield.

Sidcup.—School of Art.—Erection of, for the Kent E.C. Director of Education, Springfield, Maidstone. Dep. £2 2s.

Smethwick.—Lighting.—By electricity of Uplands School, for C.B. S. Childs, Direction of Education, Education Offices, High-st. Dep. £1 1s

Wimbledon.—Houses.—9, together with fences, paths, etc., in Faraday-rd., for T.C. B.E. and S. Dep. £1 1s.

NOVEMBER 1.

Cranbrook.—Cottages.—Four pairs of cottages, Benenden parish, 3 pairs of cottages, Frittenden parish, 8 pairs of cottages, Hawkhurst parish, 2 pairs of cottages, Kilndown parish, and 3 pairs of cottages, Sandhurst parish, for R.D.C. Eric Clarke, clerk, Cranbrook, Kent. Dep. £1 1s.

Wadebridge.—Premises.—At Glen-rd., for L. Chapman & Sons, Wadebridge. Secretary.

NOVEMBER 3.

Adwick-le-Street.—Installation.—Of electric light at Woodlands senior school, special subjects block, for West Riding E.C. Education Officer, County Hall, Wakefield.

Central England.—Works.—The Central Electricity Board invite tenders for construction of site works, foundation works and buildings in the area of the Central England scheme. Central Electricity Board, Trafalgar-buildings, 1, Charing Cross, W.C.2. Dep. £2 2s.

London, N.19.—Electricity Sub-station.—Upper Hornsey Rise, for Islington B.C. E. C. P. Monson, 120, Moorgate, E.C.2. Dep. £2 2s.

***Maidenhead.**—Houses.—For the Cookham U.D.C. Clerk, 1, Park-st. Dep. £1 1s.

Sheffield.—Facings.—Portland stone facings for new central library and art gallery, Surrey-st., for T.C. W. Geo. Davies, F.R.I.B.A., City Architect. Dep. £2.

NOVEMBER 4.

Camelford. — Convenience. — At Delabole, for R.D.C. A. B. Hansford, Building Surveyor.

Dover.—Wall.—Reinforced concrete counterfort wall in connection with Folkestone-rd. and Priory-bridge improvement scheme, for T.C. Wm. Boulton Smith, B.E. Dep. 10s. 6d.

Lowestoft.—Alterations.—To Head Post Office, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Portsmouth.—Lay-out.—Contract No. 1. Clearing, levelling, land draining and general preparation of approximately 180 acres of land for use as a landing ground for aeroplanes of all types and sizes, for T.C. Richard J. Jenkins, City E. Dep. £3.

Scotland.—Maintenance Works.—In Glasgow, Stirling, Aberdeen, Dundee, Greenock, Inverness, Paisley, Perth, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-st., S.W.1.

Sidcup.—Four Houses.—For the U.D.C. Clerk, Council Offices. Dep. £1 1s.

NOVEMBER 5.

Abercarn. — Pavilion. — On Abercarn welfare ground, for Abercarn welfare scheme. A. F. Webb, L.R.I.B.A., Tredegar-chambs., Blackwood, Mon. Dep. £2 2s.

St. Andrews.—Houses.—20 2-apartment houses, 52 3-apartment houses, and 12 4-apartment houses at Priestden Parks, for T.C. Walker & Pride, architects, Church-sq. Dep. £1 1s.

Teddington (Middlesex). — Additions. — For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

NOVEMBER 6.

Croydon.—Baths.—Swimming bath, men's slipper baths, laundry, boiler house, crush hall, communicating corridor, etc., at public baths, High-st., Thornton Heath, for C.B. B.E. Dep. £3 3s.

Dundrum.—Houses.—59 at Dundrum, Co. Dublin, for Irish Sailors' and Soldiers' Land Trust. W. J. Brown, F.R.I.B.A., 51, Upper Mount-st., Dublin. Dep. £5 5s.

Eastleigh, Hants. — Senior School. — For the Southampton C.C. Clerk, The Castle, Winchester. Dep. £1 1s. (payable to Hampshire C.C.).

Levenshulme (Manchester).—Post Office.—Erection of, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

***Muswell Hill.**—Branch Library.—Erection of, for the Hornsey B.C. Town Clerk, Town Hall, Highgate, N.6.

NOVEMBER 7.

Chester.—Additions.—To Station sorting office, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Galway.—Building.—Isolated block of building, containing 6 lecture rooms, including the electric heating, lighting, plumbing and drainage installations in connection therewith, at University College. Allan MacDonald, architect, Galway. Dep. £5 5s.

NOVEMBER 8.

Adwick-le-Street.—Rebuilding.—60 ft. of boundary wall at West Riding police station, for West Riding C.C. West Riding Architect, County Hall, Wakefield.

Cockenzie and Port Seton.—Houses.—28 flatted 3-apartment houses, and 12 flatted 2-apartment houses at Winton-pk., for T.C. J. M'Ara, architect, Cockenzie.

***Hereford.**—Extension.—To public baths, for the Corporation. Town Clerk, Town Hall. Dep. £1 1s.

Keighley.—Additions.—Also alterations to Court House, for West Riding C.C. West Riding Architect, County Hall, Wakefield.

Kingswinford.—Cottages.—56 non-parlour type on tiled house site, Pensnett, for R.D.C. W. Meredith, C.S. Dep. £2 2s.

NOVEMBER 10.

Bognor Regis.—Building.—Underground sewage pumping station, for U.D.C. J. Draper, S. Dep. £3 5s.

Skegby.—Houses.—50 parlour and non-parlour type, and construction of roads and sewers, for R.D.C. L. Dodsley, architect, Portland-chambs., Sutton-in-Ashfield. Dep. £2 2s.

Stockport.—Depot.—Bus depot, Heaton-lane, for C.B. H. Hamer, B.S.

NOVEMBER 11.

Chingford. — Senior Council School. — For the Essex E.C. County Architect, Springfield Old Court, Chelmsford. Dep. £2 2s. (to F. H. Owers, County Accountant, Duke-st.).

***Penn, Wolverhampton.**—Telephone Exchange.—Erection of, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Widnes.—Housing.—212 dwelling-houses on Kingsway estate, for T.C. B.E. Dep. £2 2s.

NOVEMBER 12.

King's Lynn.—School.—Junior boys' school and additions to present technical institute, London-rd., for E.C. L. F. Eagleton, architect, King-st. Dep. £3 3s.

NOVEMBER 13.

Keynsham.—Repairs.—To houses, for R.D.C. H. W. Argile, Building Surveyor, 16, High-st., Keynsham, near Bristol.

Lynm.—Conversion.—Of 142 privies into water closets, together with drainage works in connection therewith, for U.D.C. S.

NOVEMBER 15.

Cheshire.—Extensions.—To Winsford County secondary school. County Architect, Newgate-st., Chester. Dep. £2 2s.

NOVEMBER 17.

Hendon, N.W.4.—Town Hall Extensions.—For the U.D.C. Chairman of the Council, Town Hall. Dep. £6 6s.

Northampton.—New Technical College.—Erection of the first portion, for the E.C. Secretary for Education, 4, St. Giles' St. Dep £5 5s. (payable to the Corporation).

NOVEMBER 19.

Liverpool.—Alterations.—Also extensions, Walker Art Gallery, for T.C. Briggs & Thornley, architects, Royal Liver-building, Liverpool. Dep. £5 5s.

NOVEMBER 22.

Rothwell.—House.—Grammar school, gymnasium and caretaker's house, for West Riding E.C. Education Officer, County Hall, Wakefield.

Skipton.—Extensions.—At Skipton boys' grammar school, for West Riding E.C. Education Officer, County Hall, Wakefield.

NO DATE.

Buxton.—Painting.—Exterior of 7 houses and one garage, also one shop, in High-st. I. Sutcliffe, Brightside, 3, Compton-rd.

Congleton.—Foundations.—For concrete foundations, fencing and roadway at Authority's substation site, Bromley-st., for the North-West Midlands Joint Electricity Authority. Chairman, Engineers Committee, York-chambs., Kingsway, Stoke-on-Trent. Dep. £2.

Dundee.—Houses.—246 tenement houses at Wester Clepington under the Small's Wynd rehousing scheme, for the Corporation. Quantity Surveyor, 61, Commercial-st.

Crostland.—Repairs.—To rooms at West Vale Council school, for West Riding E.C. G. Dobson, Education Offices, Huddersfield-rd., Elland.

Hanley.—Office.—Garage and office extensions to premises, Waterloo-rd., for J. Fisher (Hanley, Ltd. A Cotton, Son & Hulme, architects, Piccadilly, Tunstall. Dep. £2.

Nantymoel.—Alterations.—Club premises. Secretary, Nantymoel Social Club, Ltd., The Square, Nantymoel.

Normanton.—Cinema.—Majestic Cinema to seat 950. Fred Mitchell & Sons, architects and surveyors, 9, Upper Fountaine-st., Albion-st., Leeds.

***Watford.**—Demolition and Rebuilding.—Of shop premises. Timothy Whites (1928), Ltd., Construction Dept., 30, Chandos-st., Portsmouth.

MATERIALS, etc.

OCTOBER 27.

Dublin.—Bricks, etc.—For Dublin United Tramways Co. (1896), Ltd. G. Marshall Harris, general manager, 59, Upper O'Connell-st.

Johannesburg.—Paint, etc.—For South African Railways and Harbours Administration. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. B.X. 6796.)

Plympton St. Mary.—Road Materials.—For R.D.C. P. T. Loosemore, clerk.

OCTOBER 31.

Southend-on-Sea. — Rubble. — 400 yds. cube of selected Kentish ragstone rubble, for Canvey Island Commission. P. J. Pease, Marsh Bailiff, South Benfleet.

NOVEMBER 6.

Berkshire.—Road Materials.—For C.C. Lt.-Col. J. F. Hawkins, C.S., Shire Hall, Reading.

Norfolk. — Road. — Materials, for C.C. S. H. Warren, C.S., Queen-st., Norwich.

NOVEMBER 8.

Bradford.—Paints, etc.—For Corporation Tramways. Tramways General Manager, 11, Forster-sq.

NOVEMBER 12.

Cambridge.—Road Materials.—For C.C. A. E. Peake, C.S.

NOVEMBER 15.

West Riding.—Road Materials.—For C.C. West Riding Surveyor, County Hall, Wakefield.

NOVEMBER 17.

Plymouth.—Tubes.—1,200 lin. yds. reinforced concrete tubes, for C.B. J. Wibberley, City E.

ENGINEERING, IRON AND STEEL

OCTOBER 27.

Bristol.—Jetty.—Reinforced concrete jetty, 260 ft. long by 61 ft. wide, and three reinforced concrete dolphins, each 20 ft. long by 18 ft. wide, in Oil Basin of Royal Edward Dock, Avonmouth, for Port Authority. Thomas A. Peace, Chief Engineer, Chief Engineer's Office, Avonmouth Dock. Dep. £5.

Dumfries.—Water Supply.—Construction of storage reservoir on Old Water with an earthwork embankment, outlet tower and culvert, waste weir and waste water channel, meter house, etc.; (2) road diversions of about 2,070 lin. yds., and (3) opening and refilling trenches for laying and jointing about 6,000 lin. yds. of spigot and faucet bitumen lined steel pipes, 12 in. diam., with other relative work, for T.C. Warren & Stuart, engineers, 94, Hope-st., Glasgow. Dep. £2 2s.

Frinton-on-Sea.—Wall.—Concrete apron to sea wall, and 2 timber groynes, for U.D.C. P. O. Macdonald, clerk.

Hinckley.—Sewage.—Extensions to existing disposal works consisting in construction of bacteria bed, pipework and other incidental works at Barwell, for R.D.C. A. H. S. Waters, E., 25, Temple-row, Birmingham. Dep. £2 2s.

Kingston-upon-Hull. — Culverts. — Three reinforced concrete culverts over Beverley and Skidby, Cottingham, and 9 ft. drains respectively on Ring-rd. (from Beverley-rd. to Inglemire-lane), for T.C. T. Thomas, City E.

Rochford.—Sewerage.—Sewerage works for about 9 miles of stoneware and iron pipe sewers with manholes, and works incidental thereto, in parishes of Rochford, Hawkwell, Hockley and Ashingdon, for R.D.C. W. E. Blizard (Lemon & Blizard), engineer, 9, Victoria-st., Westminster, S.W.1. Dep. £5 5s.

Tetnes.—Concreting.—Also completion of adit on Follaton estate, for Corporation. J. W. Smith, B.E. and S., 10, High-st. Dep. £2 2s.

OCTOBER 28.

Hallaton.—Sewerage.—Sewerage and sewage disposal works at village of Great Easton, for R.D.C. Coales & Green, chartered civil engineers, architects and surveyors, 36, High-st., Market Harboro'. Dep. £2 2s.

OCTOBER 29.

Auckland.—Sewer.—Laying of about 3,700 yds. of earthenware and cast-iron pipe sewer and construction of manholes and sewage disposal works at Sunnybrow, near Willington, for R.D.C. S., Fleet-st., Bishop Auckland. Dep. £2.

Birmingham. — Bridge. — Temporary vehicular bridge and approaches over River Tame, Aldridge-rd., Perry Barr, for T.C. H. H. Humphries, City E. and S. Dep. £2.

Kingston-upon-Hull.—Lake.—Concrete walls round Pickering-pk. boating lake and Ferens boating lake, East-pk., for T.C. T. Thomas, City E.

Surbiton.—Sewage Disposal.—Extension of existing sewage disposal works, for U.D.C. C. Edgar Shelly, clerk.

OCTOBER 30.

Aberdeen.—Water Supply.—Providing and laying about 2,700 lin. yds. of 7 in. dia., 430 yds. of 5 in. dia., 760 yds. of 4 in. dia., and 300 yds. of 3 in. dia. bitumen-lined steel water pipes and other relative works in Aboyne Village area, for C.C. Tawse & Allan, civil engineers, 10, Bon-Accord-sq., Aberdeen.

Plympton St. Mary.—Mains.—Providing and laying complete about 880 yds. of 3 in. and 4 in. dia. cast-iron water mains and appurtenant works at Plymstock and Yealmpton Torre, for R.D.C. E. Dep. £2 2s.

OCTOBER 31.

India.—Bridgework.—Structural steelwork for strengthening the Kotri bridge, for the North-Western Railway. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 16,190.)

NOVEMBER 4.

Spalding.—Sewerage.—Providing and laying of about 12,300 lin. yds. of 9-in. and 6-in. concrete pipe sewers, with manholes, etc.; about 150 tons of 4-in. to 10-in. cast-iron rising mains; and construction of pump wells and pumping stations, at River Welland, for U.D.C. C. Franklin Murphy, E., Lloyd's Bank-chambs., Morpeth. Dep. £5.

NOVEMBER 5.

Wetherby.—Sewerage.—For parishes of Wetherby, Kirk Deighton, Micklethwaite, Collingham, Linton, East Keswick, Bardsey-cum-Rigton, and Scarcroft, for R.D.C. H. Smith, clerk.

NOVEMBER 7.

Chepstow.—Water Supply.—Providing hydraulic rams, laying mains, etc., in parishes of Newchurch East, Llanvihangel Torymynydd and Wolvesnewton, for R.D.C. Hugh J. Ward, engineer, Union Offices. Dep. £2 2s.

NOVEMBER 8.

Siam.—Steelwork.—Super structures of steel railway bridges, for Royal State Railways of Siam. —, Sandberg, 40 Grosvenor-gardens, S.W.1. Charge £2.

NOVEMBER 11.

Horsforth.—Extensions.—Sewage ironwork, comprising channel penstocks, sluice doors, sludge valves and manhole covers, for U.D.C. Jas. E. Aldersley, E. Dep. £2.

NOVEMBER 18.

Bedworth.—Water Supply.—Reinforced concrete receiving tank and 750,000 gallons reservoir in connection with new water supply scheme, for U.D.C. H. W. Crowther-Green, E. Dep. £2 2s.

Wallasey.—Extension.—1,550 lin. yds. of sea wall, a marine lake, excavation and filling at rear of sea wall to promenade formation level, and laying of about 780 lin. yds. of 21-in. diameter cast-iron pipe outfall sewer, together with all other works incidental thereto, such as slipways, steps, drainage, valves, manholes, etc., at New Brighton, for C.B. L. St. G. Wilkinson, B.E. Dep. £21.

NO DATE.

Lanark.—Sewage.—Sewerage, sewage purification and other public works, for C.C. C.E., 23, Clydesdale-st., Hamilton.

ROAD, SEWERAGE, AND WATER WORKS

OCTOBER 27.

Berkshire. — Road. — Construction of Oxford-Southern by-pass from Botley to Hinksey Hill, near Oxford, approximately 2.36 miles long, for C.C. J. F. Hawkins, C.S., Reading. Dep. £3 3s.

Bromley. — Making-up. — Sewering, levelling, paving, channelling and making good Amesbury-rd., Nightingale-lane (part), Palace-view, Southview, Sunningdale, Wanstead and Woodside-rds., for T.C. B.E. Dep. £1.

Castleford.—Surfacing.—With asphalt, Church-st. (part of), and Albion-st. (part of), for U.D.C. L. Birch, S. Dep. £2.

Chingford.—Sewer.—Approximately 924 yds. of 24-in. sewer, for U.D.C. S. J. Hellier, E. and S. Dep. £1 1s.

Eastry.—Improvements.—Widening and improvement of Ackholt-rd., Nonington, from Snowdown Colliery to Aylesham, for R.D.C. H. Barker, E., 37, Queen-st., Deal. Dep. £3 3s.

Finchley.—Resurfacing.—With asphalt on concrete of East End-rd. from Manor Lodge to Manor Cottage Tavern, for U.D.C. P. T. Harrison, E., 9, The Hawthorns, Regent's Park-rd., Finchley, N.3. Dep. £1.

Finchley.—Resurfacing.—With slag tarmacadam, Clarence-gardens, Dollis-av., Long-lane, and Lyndhurst-gardens, for U.D.C. P. T. Harrison, E., 9, The Hawthorns, Regent's Park-rd., Finchley, N.3. Dep. £1.

Finchley.—Sewer.—12 in. and 18 in. diam. surface water sewer in Bow-lane allotments and Gt. North rd., for U.D.C. P. T. Harrison, E., 9, The Hawthorns, Regent's Park-rd., Finchley, N.3. Dep. £1.

Finchley.—Drainage.—Mole drainage works at Brook Farm Open Space, Whetstone, for U.D.C. Percival T. Harrison, E., 9, The Hawthorns, Regent's Park-rd., Finchley, N.3. Dep. £1.

Morden.—Paving.—Of Fieldhead-av., for U.D.C. S. L. Coupe, clerk.

Teddington.—Widening.—Also resurfacing and repaving Park-rd. (Section 3), for U.D.C. E. Bostock, S. Ten. £2 2s.

Willesden.—Making-up.—34 streets and roads, for the U.D.C. F. Wilkinson, E.

OCTOBER 28.

Hemel Hempsted.—Widening.—Also reconstruction of St. Albans-rd. for length of nearly 1 mile, for T.C. A. Murray Smith, B.E. Dep. £10.

Stourport.—Sewer.—Laying of approximately 767 lin. yds. of 9-in. stoneware pipe sewer and construction of manholes in Bewdley-rd., for U.D.C. L. H. Poole, S., 52, Mitton-st.

OCTOBER 29.

Essex. — Roads. — Approximately 6 miles of Eastern-av. carriageway, in parishes of Ilford, Dagenham and Romford, for C.C. W. H. Morgan, C.S., Old Court, Chelmsford. Dep. £5 5s.

Kingston-upon-Hull.—Draining.—Levelling, draining, turfing, etc., playing fields of St. John's-grove and Oak-rd., for T.C. T. Thomas, City E.

London.—Paving.—Paving and forming roadway and footways of Courtrai-rd., Forest Hill, for Lewisham B.C. B.S.

Merton and Morden.—Streets.—Private street works in Cranleigh-rd., approximate length 413 yds., for U.D.C. G. Jerram, E. and S. Dep. £1.

Ruislip-Northwood.—Widening.—Also reconstruction of Bury-st., Ruislip, between St. Martin's-lane and Reservoir-rd.; Ducks Hill-rd., Northwood, between The Avenue and Rickmansworth-rd., and Field End-rd., Eastcote, between Bridle-rd. and Morford-way, for U.D.C. H. R. Metcalfe, E. and S. Dep. £5.

Sunderland.—Sewer.—1,300 lin. yds. varying from 45 in. to 51 in. in dia. and from 10 ft. to 20 ft. in depth, for Hendon Burn sewer extension, for C.B. B.E. Dep. £5 5s.

Surbiton.—Making-up.—*Of* Tolworth-rd. and Ivy-rd., for U.D.C. C. Edgar Shelly, clerk. Dep. £1 1s.

OCTOBER 30.

Dartford.—Roads.—Roads and sewers on Heath-lane housing estate, for U.D.C. J. J. Hartley, clerk. Dep. £2 2s.

Fareham.—Paving.—3,800 yds. super. of wood blocks on concrete foundation at West-st., for Southampton C.C. W. J. Taylor, C.S., The Castle, Winchester. Dep. £1 1s.

OCTOBER 31.

Carmarthenshire.—Road.—Road widening at Church-st., Llangadock, for C.C. T. W. Wishlade, C.S. Dep. £2 2s.

Rotherham.—Extension.—1½ miles of 9 in. glazed-ware pipe sewers, together with manholes, etc., in the parish of Whiston, for R.D.C. A. E. Lant, E. and S. Dep. £3 3s.

Tynemouth.—Paving.—Reconstruction and repaving with cement concrete of approximately 6,850 sq. yds. of footpaths, for C.B. J. L. Beckett, B.S. Dep. £2 2s.

Urmston.—Making-up.—*Of* Granville-rd., from Cavendish-rd. to Moseid., for U.D.C. J. Heath, S. Dep. £2 2s.

NOVEMBER 1.

Totnes.—Widening.—*Of* Bridgetown Hill, for T.C. Joseph W. Smith, B.E. and S., 10, High-st. Dep. £5.

NOVEMBER 3.

Bebington and Bromborough.—Making-up.—*Of* Stanley-rd., New Ferry, for U.D.C. P. Parr, S.

Dumfries.—Pipes.—24,000 lin. ft. of 12 in. dia. bitumen-lined steel pipes, together with bitumen-lined steel specials and cast-iron specials, for Corporation, Warren & Stuart, engineers, 94, Hope-st., Glasgow. Dep. £2 2s.

NOVEMBER 4.

Eton.—Road.—Remaking part of roadway of Keate's-lane, Eton College, for U.D.C. J. E. Hattersley, S.

NOVEMBER 5.

London.—Pavings.—Compressed rock asphalt carriageway pavings, for Holborn B.C. J. E. Parr, B.E. and S., Town Hall, High Holborn, W.C.1.

NOVEMBER 7.

Leicestershire.—Reconstruction.—In cold emulsion grouted macadam, approximately 4 miles on Market Harborough—Melton Mowbray rd., for C.C. J. P. Blackwall, C.S., Grey Friars, Leicester.

NOVEMBER 11.

Reading.—Sewers.—1,500 yds. of concrete tube sewers, diameter 15 in. to 24 in., and about 1,500 yds. of 9-in. stoneware pipe sewers, on concrete foundations, at depths varying from 3 ft. to 19 ft. 6 in., together with manholes, gullevs, branch drains, outfall to River Thames, etc., at Caversham Heights, for C.B. B.S. Dep. £2 2s.

Public Appointments

OCTOBER 29.

London.—Clerk of Works (Temporary) required by the L.C.C. Architect, The County Hall, Westminster-bridge, S.E.1.

OCTOBER 30.

***Preston.**—Senior and Junior Draughtsman required by Lancs C.C. S. Wilkinson, County Architect, 16, Ribbleedale-place.

OCTOBER 31.

Newcastle-upon-Tyne.—Clerk of Works required by the Northumberland C.C. Clerk, The Moothall.

NOVEMBER 1.

***Birmingham.**—Clerk of Works (Temporary). Chief Education Officer, Education Office, Margaret-street.

NOVEMBER 3.

Chelmsford.—Assistant Heating Engineer required by Essex C.C. County Architect, Springfield Old Court.

NOVEMBER 4.

***Norwich.**—Architectural Assistant required by Norfolk C.C. County Surveyor, 9, Queen-street.

NOVEMBER 7.

Palmers Green, N.13.—Junior Engineer and Architectural Draughtsman required by Southgate U.D.C. Clerk, Town Hall.

***Winchester.**—Draughtsman required by the Southampton C.C. County Architect, The Castle.

NOVEMBER 10.

***Chelmsford.**—*(a)* Assistant Architect, *(b)* Junior Assistant Quantity Surveyor, *(c)* Two Senior Assistant Architects, *(d)* Senior Assistant Quantity Surveyor, required by the Essex C.C. Jno. Stuart, F.R.I.B.A., Old Court, Springfield, Chelmsford.

London.—Assistant Clerk (male) required in Borough Engineer's Department, Town Clerk, Lambeth Town Hall, Brixton Hill, S.W.2.

***London, W.C.1.**—*(a)* Storekeeper, *(b)* Depôt Clerk, required by the Holborn B.C. Borough Engineer, Town Hall, High Holborn, W.C.1.

South Shields.—Architectural and Housing Assistant, Town Clerk.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C. Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

Aberdeen.—Bank of Scotland, Mint-st., to be reconstructed. Architect, Clement George, 27, Deest.

Abergele.—Abergele and Pensarn U.D.C. instructed R. Green, 37, Bennetts Hill, Birmingham, to prepare plans and specifications for sewerage scheme, at £17,000.

Allreton.—U.D.C. to erect 50 non-parlour and 14 parlour type houses.

Arnold.—U.D.C. to erect 18 houses, Church-crescent site.

Ashby-de-la-Zouch.—R.D.C. propose 112 houses at Oakthorpe, Ravenstone, Swarmington and Thringstone.

Ashton-under-Lyne.—T.C. to consider elementary school at Smallshaw, with accommodation for 500 children. J. Rowbottom, B.S.

Atherstone.—For purpose of extension of Central School site, Warwickshire E.C. recommended to purchase land containing about 2½ acres for £250.

Batby.—R.C. Authorities acquired site to erect new R.C. church and presbytery.

Birmingham.—City Council provisionally accepted tender for central fire station with residences for officers, at £164,875.—E.C. propose alterations at various schools, at £15,262, also to extend Dolphin-lane school and Yarnfield schools, at £2,860.

Blackpool.—Alterations to "Victoria Hotel," Central Beach, for Richard Seed & Co., Ltd., brewers, Spring-lane, Radcliffe. R. B. Mather, Sons & Wilding, architects, 34, Birley-st.

Bolton.—James Wilson & Co. (Manchester), Ltd., Kemp-st., Oldham-rd., Manchester, acquired Alma Mills, Daubhill.

Bolton-on-Dearne.—Accommodation of proposed new senior school to be increased from 1,200 to 1,280, at £7,500. Plans by County Architect, H. Wormald, County Hall, Wakefield.

Bournemouth.—E.C. to acquire sites for erection two new schools.—Junior mixed school to be built at Hill View-rd. and central school, off Kinson-rd.

Bradford.—Plans approved for 5 lock-up shops, John-st. Market, for Markets Committee.—Provision for erection of veteran's shelter in Lister-pk. approved. W. Williamson, F.R.I.B.A., City Architect.—T.C. approved plans for bottling shed at Starr Hill, Wyke, for P. Coulson.—Land, four cottages and Odsall Lodge, Odsall, been acquired by E.C. for education.—City Architect to prepare plans for extension of Allerton Infants' School. Also to prepare plans for pavilion at Swain House Field.—Council to provide fencing to enclose field, at £1,950.

Bramley (S. Yorks).—Funds being raised for C. of E. mission church.

Brampton-Bierlow.—It is proposed to erect mission church. Funds being raised.

Bradbury.—Cheshire E.C. propose infant's school for 150 scholars. Plans by County Architect, F. Anstead Browne, F.R.I.B.A., Newgate-st., Chester.

Bridport.—T.C. to build 10 more houses at Skilling and to make start at Courts Orchard site, North Allington, by building 10 houses there.

Brierfield.—County Architect, 16, Ribblesdale-place, Preston, preparing plans for elementary school.

Brighton.—Elementary Schools (Programme) Branch Sub-Committee recommend plans be prepared for senior school of two departments for 320 scholars each on Whitehawk estate.

Bromley.—T.C. approved: W. F. Ball, 6 houses, Avondale-rd.; H. F. Thoburn, 9 houses, Nightingale-lane, and house, Pembroke-rd.; G. L. Walton, 16 houses, Canon-rd.

Caistor.—R.D.C. informed that Lindsey County E.C. proposed building elementary school to accommodate 330 children, available for parish of Caistor, and for senior children of parishes of Nettleton, Grasby, Swallow and Rothwell.

Carlisle.—City Council to erect an additional 160 houses.

Castleford (Yorks).—Montague Burton, Ltd., propose alterations to 26 and 28, Carlton-st. Plans by H. Wilson, architect, 81, North-lane, Leeds.

Chatham.—T.C. approved: Games Hall, Star Mill-rd., G. B. Silver; 12 houses, Beechwood-av., A. E. Clifford & Co.

Chesterfield.—E.C. to acquire Hasland Hall and grounds for provision of modern senior school.

Cleckheaton.—Spenborough U.D.C. propose shop premises, General Housing Estate. Alterations proposed in town hall.

Cork.—Corporation received report of City Manager on housing scheme in North-West Ward, as outlined in report of J. R. Boyd Barrett, architect who advised that 11¼ acres of land be acquired and 208 houses built thereon, at total cost of £341 per house.

Coulsdon and Purley.—U.D.C. approved:—County of London Electric Supply Co., Ltd., electric transformer sub-station, Sanderstead Court-av., Sanderstead; S. H. Palmer, 3 pairs semi-detached houses, Upper Selsdon-rd., Selsdon; Mrs. E. E. Murray, lock-up garages, off Windermere-rd., Coulsdon; F. March, extension to shop premises, 100, Brighton-rd., Coulsdon; F. Betts, 12 lock-up garages, rear 57-71, Old Lodge-lane, Purley; Miss Bailey, school-room and garage, "St. Davids," Woodcote Valley-rd., Purley; Lloyds Bank, Ltd., bank and offices, corner of Station Approach and Brighton-rd., Coulsdon; James & Woodworth, 12 pairs semi-detached houses, Kingsway-av., Selsdon Park Farm estate, Selsdon; Thomas & Son, 14 detached houses, new road off The Wend, Coulsdon; County of London Electric Supply Co., additions to electric transforming sub-station and offices, High-st., Purley; A. G. Gresswell, 20 pairs semi-detached houses, Rickman Hill, Coulsdon.—U.D.C. to spend £24,360 on various sewerage works.—Surveyor submitted scheme for maisonettes on land at Old Lodge-lane and a plan showing suggested lay-out for 20 houses on land in Limpsfield-rd.

Coventry.—Factory and premises at works of Geo. Wilson, Ltd., Gas Meters, Foleshill-rd. Thomas R. J. Meakin, L.R.I.B.A., architects, 11, Warwick-row.

Denholme (Yorks).—U.D.C. to acquire site off John-st. for housing.

Doncaster.—C. of E. authorities propose churches at Wheatley, St. Hilda's, Thurnscoe, and at Armthorpe.—Mission churches to be built at Springwell-lane and adjoining Christ Church.

Dorchester.—T.C. approved: shop premises at old Grammar School buildings, Hy. Duke & Son; shop extension, Joseph Frisby, Ltd., at South-st.

Dublin.—Following plans for new buildings and works of reconstruction approved by City Architect: Griffith-av., 13 houses, Homestead Building Society.

Enniskillen.—Engineering Inspector to Northern Ministry of Home Affairs held inquiry into application for loan for workmen's houses, and also for £1,800 for purchase of 16 acres of land for public dumping ground and other municipal purposes.

Fareham.—New garages adjoining 12, West-st., for Hants and Dorset Motor Services, Ltd., of 368, Shirley-rd., Southampton. Norman Henry Atkins, L.R.I.B.A., architect, 62, West-st.

Farnham.—U.D.C. received sanction of M.H. to borrowing £4,180 for further 12 cottages at Trapes.—Plans approved: rebuilding Lloyds Bank, Castle-st., T. M. Wilson, for Lloyds Bank; alterations, "The Black Prince," Hale, Friary, Holroyd & Healys Brewery, Ltd.

Fetcham.—Epsom R.D.C. approved: 3 pairs of houses in New-rd., Cannon Court estate, for Mrs. E. E. Hartley, and 6 bungalows, for E. W. Scarlett.

Galway.—Important step in development of port made by Harbour Commissioners, when they adopted £56,000 scheme submitted by harbour engineer, W. N. Binns, B.E.

Gillingham.—Plans approved: 4 houses, Gordon-rd., W. E. R. Randall & Sons, for C. J. Howard; 6 houses, Cecil-av., F. T. Mattocks, for J. F. Eldridge; offices, London-rd., Rainham, F. T. Mattocks, for Rainham Water Co.; 17 bungalows, Eastcourt-lane, F. B. Hooper, for H. Brunning.

Glasgow.—Corporation are to build school, Springfield-rd. Education Architect, William McCaig, 129, Bath-st.—Church, at King's-park. Architects, Hutton & Taylor, 212, Bath-st.—Council to erect another new school, Balmore-rd. Education Architect, William McCaig, 129, Bath-st.—Hugh McDougall, 48, Grant-st., Glasgow, to build 36 houses at Germiston for Corporation. Architect, R. Horn, A.R.I.B.A., Housing Director, Trongate, Glasgow.—Garage at Hope-st., Glasgow, for 200 motors. Architect, J. C. Aitchinson, 170, Hope-st.—Plans by first D. of G. Court for school, Knightswood. Architects, Ross & Buchanan, 189, Pitt-st.—Gas Produce Building for William Beardmore, Ltd., Parkhead. Plans by firm's own architects.—£15,000 extension to bakery for W. G. McFulay, Orr-st. Architects, Frank Petrie, Library-bldgs., Greenock.—New ward for Western Infirmary. Architects, J. Keppie & Henderson, 257, West George-st.—Plan by the D. of G. Court for new school. Architect, T. Baird, 124, Bothwell-st.—New Methodist Church for King's-pk. No architect yet appointed.—Alteration on Royal Scottish Automobile Club. Architect, J. Miller, F.R.I.B.A., 15, Blythswood-sq.

Hastings.—T.C. approved: 12 houses and 2 shops, Hythe-av., St. Mary's estate, St. Leonards, Bexleigh Estates, Ltd., owners, per H. H. Ford, architect; 4 houses, 190-196, Bexhill-rd., St. Leonards, A. Honnor, owner, per Ward, Son & Wray, architects; garage, North-rise, Fairlight-rd., Mrs. Skyrme, owner, per J. Hunt, architect; alterations, Sedlescombe-rd. North, St. Leonards, H. D. Hanks, owner, per Jeffery & Bowcock, architects; garage, Glyne Gap, Bexhill-rd., St. Leonards, Messrs. Trantom & Gibbs, owners, per J. S. D. Hicks, architect; 2 houses, 283 and 284, St. Helen's-rd., F. Bishop, owner, per H. M. Jeffery, architect; house and garage, St. Helen's-rd., Mrs. Brooke, owner, per J. S. D. Hicks, architect; passage widening, Post Office-passage, Watney, Combe, Reid & Co., Ltd., owners, per —. Howard, architect.

*See also our List of Contracts, Competitions, etc.

Hendon.—Ayrton & Alderson Smith intimate to R.D.C. that C.C. were proposing to acquire as school site part of the land lately scheduled for open space between Kenton-lane and Kingshill-av.

Hendon.—E.C. are building another school at Mill Hill.

Hope.—Derbyshire C.C. propose school off Edale-rd. Plans by County Architect, G. H. Widdows, F.R.I.B.A., St. Mary's-gate, Derby.

Hull.—F. J. North & Harry Andrew, AA.R.I.B.A., Custom House-bldgs., Whitefriargate, preparing plans for housing scheme, for Sutton Trustees.

Hyde.—J. H. Ward, B.S., preparing plans for road from Hyde to Sandy-lane, Romiley, estimated to cost £35,000.

Irlam.—Rev. James S. Lineen, B.A., of St. Teresa's Church, Liverpool-rd., raising funds for improvements and extensions to day and Sunday school, at about £2,000 to £3,000. Plans by W. Ellis, F.M.S.A., architect, 49, Deansgate, Manchester.

Keighley.—West Riding E.C. propose to erect Keighley, Drake and Tonson's new school, at £49,950. Tenders to be invited. Plans by H. Wormald, County Hall, Wakefield.

Kettering.—U.D.C. approved: Northants C.C., extension to Poor Law Institution, London-rd.; P. Phipps & Co., Ltd., additions to "Spring Gardens" inn, Northall-st.; A. P. Lewis & Son, Ltd., 3 houses, Gipsy-lane.

Lathom and Burscough.—U.D.C. approved: 8 pairs cottages in Platts-lane, for Burscough Brick and Tile Co.

Leeds.—T.C. received sanction to borrow £37,930 for houses and flats at Middleton.

Leicester.—C.C. propose school for defective children in Duxford-rd., at £1,922.

Leyland.—British Legion Committee proposing premises in School-lane. Plans by H. B. Moss, architect, Park-rd.

Lincoln.—City Council to apply to M.H. for £1,284 for acquisition of site between Spring-hill Council school and St. Martin's Parochial junior girls' and infants' school for completion of re-organisation scheme for senior girls in central part of city; and £6,256 13s. 7d. for extension of Spring-hill Council school.

Liverpool.—T.C. received M.H. sanction to £15,000 for lay-out of Otterspool-pk.—£1,450 to be spent on various works at Municipal Offices.—Land at Leeds-st. and Pall-Mall to be let to Councillor R. J. Hall for purpose of erecting premises.—Application to be made to M.H. for £457,570 for 1,079 houses on various sites.—T.C. to make application to Ministry for compulsory acquisition of land in Gerrard-st. clearance area, land in Titchfield-st.—Application to M.H. to be made for £2,530 for site and premises of Leyfield Grange, West Derby, for public elementary school; £3,619 for playing field in Rack-lane, West Derby; £6,113 for Norris Green school clinic and maternity and child welfare centre.—E.C. recommend application to M.H. for consent to appropriation of site at rear of Childwall-rd. and Thingwall-rd., Wavertree, for new Holt secondary school.—E.C. proposing plans for 400 temporary places on Grandison-rd., Walton-Clubmoor site, in addition to school sanctioned.—Sanctioned £12,450 and £4,515 for new public baths in Kensington.—M.H. sanctioned borrowing of (*a*) £1,167 for conveniences at Holt recreation ground, Circular-rd. East (Norris Green), and Sefton-Pk., and bowls pavilion at Circular-rd. East; and (*b*) £461 for golf shelters at Kirby Municipal Golf Links.—Electricity Commission sanctioned borrowing by Corporation of £206,170 for installation of second 50,000 k.w. turbo alternator set, with necessary auxiliary plant, at Clarence Dock Power Station.

Liverpool.—Edmund Kirby & Sons, F.R.I.B.A., 5, Cook-st., architects for alterations and additions at Convent of Notre Dame, Mount Pleasant, for Sisters of Charity.

London (Deptford).—B.C. received M.H. sanction to borrowing £8,662 for Old Town Library, Clyde-st.—Plans passed:—Arbro, Ltd., 32-34, Theobald's-rd., W.C.1, new store, 53a, Malpas-rd.; London Electric Supply Corporation, Ltd., 25a, Cockspur-st., S.W.1, sub-station, west side of Briant-st.

London (Fulham).—B.C. received L.C.C. sanction for lay-out plan for erection of dwellings on Swan Brewery site.—Drainage plans passed:—G. Guy Rogers, 133, New King's-rd., additional building; H. Wilson, building, 312, North End-rd., and 1a and 3a, Haldane-rd.

London (Lewisham).—B.C. approved:—G. W. Crosby, 3 houses, Baring-rd.

London (St. Pancras).—B.C. to borrow £15,500 for new works department depôt in James-st.—Application to be made to Electricity Commissioners for borrowing £47,278.

London (Wandsworth).—B.C. approved:—W. Willet, Ltd., house, Parkmead, and house, Dover Park-drive adjoining Charnwood, Putney; G. Spencer & Co., alterations to billiards hall, 42, Streatham High-rd.; J. S. Quilter & Son, almshouses, Polworth-rd., Streatham; Trigge & Co., Ltd., alteration, Tooting Home, Church-lane, Tooting; W. Laurence & Son, Ltd., alterations and additions to Starkie Gardner's, Ltd., premises, Merton-rd., Southfield; J. Batty, alteration and additions at Rochampton Estate Tenants Association Club, Putney Park House, Putney Park-lane, Putney; J. E. Billings & Co., Ltd., block 56 flats, Merton-rd., and block of 16 flats in Acuba-rd., Southfield; Bleach & Dorey, Ltd., addition to Cow's Rubber Factory, Factory-sq., Streatham; Clemence & Co., alterations at and additions to The Bell p.h., The Plain, Southfield; H. F. Buchan, 14 houses, Ellison-rd., and Guildersfield-rd., Streatham; H. R. Watts, ice rink, 382, Streatham High-rd.; H. H. Knight, two garages on sites adjoining 47 and 54, Honeybrook-rd., Clapham South respectively; F. Bridger, garages, 27, Halden-rd., Southfield; Annesley, Brownrigg & Hiscock, two shops on site adjoining Southfields Station; The Universal Housing Co., Ltd., house (Thorpe Lodge), Princes-rd., Southfield; B. Gruntwag, 4 houses, 3 in Chartfield-av., adjoining 36, and 1 in Genoa-av., Putney; Castle & Sons, sports pavilion, Wandsworth County School, Sutherland-grove, Southfield; A. Soden, 6 houses, Hoadley-rd., near its junction with Abbotswood-rd., Streatham; Newborn & Smith, alteration to Audley Lodge, Putney Park-av., Putney; B. G. Utting, 40 houses and 20 garages in road No. 3 and 12 houses and 5 garages in road No. 4 on the Wellfield estate, Streatham; Edwin Evans & Sons, keepers lodge at Wandsworth and Wimbledon War Memorial playing fields, Kingston-rd., Putney; Foster & Dicksee, Ltd., alterations to Coventry Hall, Streatham High-rd.

London (Wandsworth).—B.C. received formal licence from L.C.C. for permanent bridge over river Wandle in continuation of The Baulk.—Council also proposing following convenience schemes:—Junction of York-rd. and Podmore-rd., Fairfield, in vicinity of Wandsworth Railway Station; Clapham Common north side, near public library; Streatham Hill at junction of Leigham Court-rd.; Tooting Bec rd. at junction with Upper Tooting-rd.; junction of Upper Richmond-rd. and West Hill; Putney Bridge Junction of Lower Richmond-rd., near existing men's convenience.

Macclesfield.—Branch premises for Co-operative Society, Ltd., at £16,000. Whittaker & Bradburn, architects, 25, King Edward-st.

Maidenhead.—T.C. considering new school in North Town.

Maltby.—John Smith's Tadcaster Brewery Co., Ltd., to carry out alterations and improvements to "Queen's Hotel." B. Wilson, architect, High-st., Tadcaster.

Manchester.—Plans approved: Co-operative Wholesale, for Beswick Co-operative Society, extension to dairy, Bosworth-st., Bradford; J. Sunlight, caretaker's house to offices, Sunlight House, Quay-st.; J. H. Kewell, for W. H. Coupe, 8 houses, Blue Bell-av., Moston; Roberts & Wood, for W. J. Davies, 6 houses, Hermitage-rd., Crumpsall; W. Booth, 4 houses, Rupert-st., Clayton Bridge, Newton Heath; F. J. Pearson, 20 lock-up garages, Birchall-lane, Rusholme; J. McMorran, 10 houses, Kingsway and Gawsworth-av., Didsbury; —, Tilehurst, for A. W. Bulley, 16 houses, Grange-av., Levenshulme; Didsbury Park, for John McMorran, 10 houses, Kingsway and Wilmslow-rd., Didsbury; Wilson's Brewery, alterations to "Bee Hive" hotel, Clopton-st. and Warde-st., Hulme; Thos. Worthington & Sons, for Victoria University Physics Laboratory to University, Coupland-st., Chorlton-upon-Medlock; Housing Committee, 14 houses, Mauldeth-rd. West and Yew Tree-rd., Withington; Governors, covered corridor to Withington Girls' School, Wellington-rd.. Withington; J. C. Ward, The Bungalow, Cleveland-rd., 6 houses, Cleveland-rd. and Pelham-rd., Crumpsall; Sparkes & Stephens, 28 houses, Broadhill-rd., Burnage.

Monk-Fryston.—Alterations to be carried out at Old School House. Tenders to be invited by Church Vicar.

Mortlach.—New church. Builder, G. Stewart, Dufftown. Architects, J. Marshall, MacKenzie & Son, 173, Unwin-st., Aberdeen.

Nelson.—Application for sanction to borrowing sums by T.C. were approved: £24,920 for alterations and extensions of Bradley, Walverden, Whitefield, Lomeshaye and Bradshaw-st. Council schools; £15,956 10s., 38 additional houses, Hodge House estate, and £21,600, extensions to retort house, Brierfield Gasworks.

Newcastle.—To provide space for woodwork and metalwork shop, new biology laboratory and geography room, another building is to be constructed at Royal Grammar School. Architects are Marshall & Tweedy, of Pilgrim-st., Newcastle.

Newport (I. of W.).—Plans approved by R.D.C.: 8 houses, Downside-av., Niton, J. H. & T. A. Bright.—Sanction to borrowing £360 for purchase of land and £4,777 for houses at Carisbrooke received.

Northfield.—Roman Catholic Church school and Presbytery, at £2,500. Plans by Father F. Askew, House of Retreats Convent, Harborne Hall, Harborne, Birmingham.

Ormskirk.—Ellis, Warde & Co., Bath Spring Brewery, proposing alterations to "Commercial Hotel," Ormskirk; "Plough" inn, Ormskirk; "Hen and Chickens," Melling, near Liverpool; "Hare and Hounds," Maghull, near Liverpool, and the "Derby Arms," Aughton. Plans by Christopher Brighouse, architect, 28, Burscough-st. —Lancashire E.C. propose to extend girls' school providing for 300 scholars. Plans by County Architect, S. Wilkinson, F.R.I.B.A., 16, Ribbleadale-place, Preston.

Plymouth.—Alterations and extensions are proposed to premises in Russel-st. Plans by Carder & Carder, architects and civil engineers, of 3 and 4, Buckland-ter.—Garages at Mutley Plain for James Hearn, of 7, Seymour-ter. Plans by Hubert J. Mammick, L.R.I.B.A., 63, Old Town-st.

Portsmouth.—T.C. approved: Independent Order of Rechabites, shop, hall and flats, 1, The Birklands, London-rd.; Portsmouth and Brighton Breweries, Ltd., rebuilding "Coach and Horses" p.h., London-rd., Hilsea; Portsmouth Swimming Club, extension to dressing-room, Clarence Esplanade (beach); E. Wright, 6 houses, Madeira-rd.

Rawdon.—It is proposed to adapt Mitchell Memorial Hall to accommodate crippled children, at £23,930. Plans by County Education Architect. Tenders to be invited.

Reading.—T.C. to erect chapel at Henley-rd. Municipal Cemetery. Sanction of M.H. to borrowing £5,560 been received.

Renfrew.—Extension to Babcock and Wilcox, Ltd., boilerworks, Renfrew, to be undertaken. Architects, own staff.

Rochdale.—Smith & Cross, architects, Town Hall-chams., prepared plans for branch premises for Lloyds Bank, Ltd., in Yorkshire-st.

Romford.—Council approved: 4 houses, Straight-rd., A. T. Smith; 4 houses, Lilliput-rd., S. J. Davis; 8 houses, Lilac-gardens, W. W. Watts; 10 houses, Straight-rd., A. T. Smith; 6 houses, Straight-rd., A. T. Smith; 12 houses, Mawney-rd., H. Johnson.

Saffron Walden.—B.E. of T.C. reported that, in conjunction with S. to R.C., plans and specifications and estimates been prepared and forwarded to Essex C.C. for widening of Springwell-rd., leading from Saffron Walden to Great Chesterford. Cost estimated at £25,000.

St. Faiths.—Housing Committee recommended houses in district, viz., 4 at Drayton, 4 at Horsford, 6 at Sprowston and 2 each at St. Faith's, Horstead, Taverham, Hellesdon and Salhouse.

St. Helens.—Plans passed: 24 and 14 houses, Chamberlain-st., J. M. Wilson & Son; additions to Catholic Grammar School, West Park-rd., Rev. Bro. Francis.

St. Thomas's (Exeter).—M.H. given approval of R.D.C. to proceed with 32 houses.

Salford.—Office premises for Royal Liver Friendly Society in Islington-st.

Scarborough.—T.C. received grant of £37,107 towards new road from Westborough to Victoria-rd., and has received sanction for widening and extension of Northstead-lane to Peasholm Glen, to cost £14,613.

Shipley.—U.D.C. acquired site for open-air school and sanction to borrow £4,140 has been received to carry out extensions to Otley-rd. Council schools.

Silsden.—Workmen's Housing Association, Ltd., propose 30 houses.

Snaith (Yorks).—E.C. to build two Council schools, one at Snaith and one at Rawcliffe. Plans by County Architect, H. Wormald, A.R.I.B.A., County Hall, Wakefield.

Somerset.—C.C. to apply for loans of £18,015 and £20,968 for schools at Bruton and Clevedon.

Southampton.—C.B. approved grant to governors of King Edward VI. School, Southampton, for building new school to accommodate about 600 boys.

Stainforth.—C. of E. authorities propose church and new mission churches at Southley, Hillsborough and Intake.

Stockport.—G. H. Hill, consulting engineers, Booth-st., Manchester, been appointed by Corporation to design construction of Fernilee reservoir and ancillary works and supervise.

Stockton.—T.C. to purchase for housing 27 acres of land on Eastbourne estate, Hartburn, for £3,812. —Plans passed: alterations, "Commercial Hotel," Norton, J. W. Cameron & Co.; 14 semi-detached houses, Oxbridge-lane, R. W. Russell & Son; temporary church in Durham-rd., Rev. A. J. Bott (Vicar of St. John's).

Surbiton.—U.D.C. approved: 4 houses, 88, 90, 92, 94, Warren-drive, J. J. Hodgson & Sons; 8 semi-detached houses, Tolworth-rise, English Houses, Ltd.; 12 houses, 55 to 65, and 54 to 64, King's-drive, B. Godfrey; 24 houses, Chilmleigh-walk, Thorne & Thorne; 2 houses, The Ridings; 2 houses, 6 and 8, The Byeways; semi-detached houses, The Ridings; pair houses, Tolworth-rise; 16 shops, Tolworth-rise, H. C. Jones & Co.; 6 shops, Raeburn-av. and Warren-drive, A. Searle.

Tadcaster.—R.D.C. to proceed with 52 houses at Swillington and 40 at Tadcaster. Tenders to be invited.—Alterations to be carried out to "Old Fleece" inn, architects, Garside & Pennington.

Upholland.—W. Thornley, L.R.I.B.A., architect, 46, Wallgate, Wigan, preparing plans for Primitive Methodist chapel at Digmoor. Cost £2,000.

Wakefield.—T.C. has approved 23 houses in Brunswick-st. Plans by City Architect, Percy Morris, A.R.I.B.A., Town Hall, Wakefield.—City Architect to prepare plans for branch library and four shops at corner of George-a-Green-rd. and Dewsbury-rd.—Public conveniences in Pinderon-st. to cost £2,500.—City Architect is to prepare plans for public slaughter-house.—E.C. propose gymnasium at Snapethorpe School.—An open-air school to be erected at Snapethorpe, with accommodation for 180 places.

Walsall.—T.C. propose to spend between £600 and £700 on alterations to 245a, Stafford-st.—Purchase houses near tramway depot at North Walsall for £2,570.—Seek compulsory acquisition to acquire Hatherton House farm at Harden, Walsall, and adjoining land, totalling 63 acres, and appropriation of Blakenall-lane for new school to be erected there.

Wellingborough.—U.D.C. propose another 24 houses at Croyland-rd., and has acquired land at Roberts-st. for additional 90 houses. Surveyor, B. Stevenson Henshaw.

Whitby.—U.D.C. to sell land on new Royal Crescent, at present used as parkage, for erection of private hotel.

Woodhall Spa.—John Lewis, London, acting for syndicate, acquired Bromo-Iodine baths and Victoria-grounds, which it is proposed to develop and bring up to date, and it is proposed to rebuild the "Victoria Hotel."

Worcester.—Recommendations from two committees—Housing and Health—for five years' house-building programme, comprising some 1,300 dwellings, been before City Council.

York.—City Council purchased land on Garrow Hill estate for housing purposes.—Governors of York Diocesan Training College proposing remodelling Model School in connection with extensions of college.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 13 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, 42		Best Blue Pressed Staffs	9 5 0
King's Cross	2 12 3	Do. Ballasce	9 15 0
Do., grooved for Plaster	2 14 3	Blue Wire Cuts	7 5 0
Do. Ballasce	3 7 3		

White Midland Facing Bricks (delivered London site)

	£ s. d.
	5 0 0

Best Stourbridge Fire Brick :—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretchers	21 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	26 10 0
		One Side and two Ends	30 10 0
Headers	20 10 0	Two Sides and one End	31 10 0
Cusins, Buller's nose and 4½ in.		Splays, and Squints	28 0 0
Flats	27 10 0		

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 1os. extra over white.

BREEZE CONCRETE SLABS
Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd. super	2 9
2½ in. " "	2 4	4 in. " "	3 6

	s. d.	
Thames Ballast	9 9	per yd
Pit Sand	12 0	" "
Thames Sand	12 0	" "
Best Washed Sand	12 6	" "
¾ in. Shingle for Ferro-Concrete	11 6	"
½ in.	12 0	"
¼ in. Broken Brick	11 6	"
Pan Breeze	8 0	"

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement. British. Standard Specification. Test £2 6 0 to £2 8 0

30s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 7 6
Vitrocrete " "	0 7 6
Super Cement (Waterproof)	3 16 0
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Roman Cement	5 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair	per cwt. 2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.

Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube

	s. d.
	2 10

BEER STONE—RANDOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE.—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4½
Do. do. delivered on road wagons at above stations, per ft. cube 4 5½
White bastbed, 3d per ft. cube extra.
NOTE.—1d. per ft. cube extra for every foot over 20 ft average, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.—
F.O.R. Quarries, Wirksworth, Derbyshire, s. d.
Random blocks from 10 ft. and over F. ft. cb. 14 0
Sawn two sides " 22 6
Sawn three or four sides " 27 6

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station, London.
6 in. sawn two sides landings to sizes (under 20 ft. super) Per ft. super 5 6
6 in. rubbed two sides, ditto " 6 0
3 in. sawn two sides slabs (random sizes) " 2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) " 1 6½
1½ in. to 2 in. ditto, ditto " 1 3½

HARD YORK—
Delivered at any Goods Station, London.
Scappled random blocks Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super 5 1½
6 in. rubbed two sides, ditto " 6 1½
4 in. sawn two sides slabs (random sizes) " 3 1½
3 in. ditto ditto " 2 10
2 in. self-faced random flags Per yd. super 0

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 5s. 6d.; Moulded, 6s. 6d.; Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
6 x 11	£27 10	3 x 6	£21 0
6 x 9	25 0	3 x 11	25 0
6 x 8	25 0	2 x 11	26 0
6 x 7	23 0	3 x 9	24 0
3 x 8	25 0	2½ x 9	24 0
3 x 7	22 0	3 x 4½	21 0
2½ x 7	21 0	3 x 4	21 0

PLANED BOARDS.

1 x 11	£30 0
1 x 9	£28 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
⅝	18/-	1¼	30/-
¾	21/-	1½	34/-
1	24/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.
1	24/-
1¼	30/-
1½	34/-

MATCHING (BEST)

Inches.	per sq.
¾	16/6
⅞	19/-
1	24/-

Ins. BATTENS	s. d.
¾ x 2 per 100 ft.	2 6

SAWN LATHS. s. d.
Per bundle 2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16	0 to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 14	0 to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10	0 to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0'15	0 to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 16	0 to 1 1 0
Dry Cuba Mahogany, ft. cube	1 1	0 to 1 10 0
Dry Teak, ft. cube	0 13	0 to 0 15 0
Dry American Whitewood ft. cube	0 10	0 to 0 14 0
Best Scotch Glue, per cwt.	4 10	0 to —
Liquid Glue, per cwt.	4 7	0 to 5 10 0

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First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	31 0 0	18 by 10	17 5 0
22 by 12	27 19 6	18 by 9	15 10 0
22 by 11	25 5 0	16 by 10	14 14 6
20 by 12	24 7 6	16 by 8	11 5 0
20 by 10	20 17 6		

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Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	£5 2 6
ditto hand-made ditto	5 7 6
Ornamental ditto	5 12 6
Hip and valley tiles (per dozen) Hand-made	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.
R.S. Joists, cut and fitted	£12 10 0
Plain Compound Girders	14 10 0
" Stanchions	16 10 0
" In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ¾ in.	10 15 0
⅜ in.	11 0 0	⅞ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ½ in. and under.	Fittings. Over ½ in.	Flanges. ½ in. and under.	Flanges. Over ½ in.
	%	%	%	%	%	%
Gas	65	52½	45	47½	55	57½
Water	61½	48½	40	42½	50	52½
Steam	57½	45	35	37½	45	47½
Galv. gas	52½	40	35	37½	45	47½
Galv. water	47½	35	30	32½	40	42½
Galv. steam	42½	30	25	27½	35	37½

*C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	10d.	7½d.	2½d.
3½ in.	10½d.	8½d.	2½d.
4 in.	10½d.	9½d.	2½d.
4½ in.	11½d.	10½d.	2½d.
5 in.	1/1½	11½d.	3½d.

*O.G. GUTTER.

3 in.	1/0	10½d.	2½d.
3½ in.	1/0½	10½d.	2½d.
4 in.	1/1½	10½d.	2½d.
4½ in.	1/2½	1/0½	2½d.
5 in.	1/3	1/2½	3½d.

*RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/2½	9½d.	1/2
2½ in. "	1/3	10½d.	1/4½
3 in. "	1/6½	1/1½	1/8½
3½ in. "	1/11	1/4½	1/11½
4 in. "	2/2½	1/7½	2/4½

*The above R.W. Goods prices are subject to an advance of 5% from October 29th, 1929.

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Pipe, angles, stock angles.	Bends, stock Branches.	
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts. plain	2 5	1 9	2 1
2½ in. "	2 9½	1 10½	2 7
3 in. "	3 0	2 1	3 1
3½ in. "	3 3	2 7	3 7
4 in. "	3 8	2 11	4 1½

L.C.C. COATED DRAIN PIPES—London Prices ex Works

	Bends, stock Branches, Pipe, angles, stock angles.		
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	3 6	4 6	7 0
4 in. " "	4 8	5 5	9 3
5 in. " "	5 3	9 6	15 0
6 in. " "	7 3	1 6	19 0

Gasket for jointing 4½/- per cwt.

	Per ton in London		
IRON—	£ s. d.		£ s. d.
Common bars	11 0 0	to	12 0 0
Staffordshire Crown Bars—Good merchant quality	11 5 0	to	12 5 0
Staffordshire Marked Bars	14 0 0	...	15 0 0
Mild Steel Bars	9 10 0	...	10 10 0
Steel Bars, Ferro-Concrete quality, basis price	9 0 0	...	10 0 0
Hoop iron, basis price	11 0 0	...	12 0 0
" Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—Ordinary sizes, to 20 g.	11 10 0	...	12 0 0
" " " 24 g.	13 0 0	...	14 0 0
" " " 26 g.	15 0 0	...	16 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	14 10 0	...	15 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	15 10 0	...	16 10 0
Ordinary sizes, 6 ft. by to 3 ft. to 26 g.	18 10 0	...	19 5 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets— Ordinary sizes, 6 ft. to 9 ft. to 20 g.	15 0 0	...	16 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	15 10 0	...	16 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	18 10 0	...	19 10 0
Sheets Galvanised Flat, Best quality— Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	20 10 0	...	21 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	22 10 0	...	24 10 0
Best Soft Steel Sheets, 26 g.	24 0 0	...	25 0 0
Cut Nails, 2 in. to 6 in.	16 0 0	...	17 0 0

Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)

	£ s. d.
LEAD—Sheet, English, 4 lb. and up	25 0 0
Pipe in coils	25 10 0
Soil pipe	28 10 0
Compo pipe	29 10 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt extra. Cut to sizes, 5s. cwt. extra.

Old lead, ex London area, at Mills per ton £14 10 0

COPPER.

		s. d.
Seamless Copper tubes (basis)	per lb.	1 3
Strong sheet	"	1 0
Thin	"	1 1
Copper nails	"	1 7
Copper wire	"	1 4

PLUMBERS' BRASS WORK.
Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F

¼ in.	½ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.
6 lbs. P. traps	33/-	41/-	56/-	101/- per doz.
6 lbs. S. traps	35/-	45/-	60/-	126/- "

TIN.—English Ingots, 1/11 per lb. SOLDER.—Plumber's 9d., Tinmen's 11d, Blowpipe 1/- per lb.

PAINTS, &c

Raw Linseed Oil, in pipes	per gallon	0	2'10
" " " in barrels	"	0	3 0
" " " in drums	"	0	3 3
Boiled " " in barrels	"	0	3 3
" " " in drums	"	0	3 5
Turpentine in barrels	"	0	2 5
" in drums (10 galls)	"	0	3 7
Genuine Ground English White Lead, per ton		48	0 0

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 5/0 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—(*cont.*)

PAINTS, &c.—(*cont.*)

GENUINE WHITE LEAD PAINT.

	£ s. d.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganwyte," "Poiseeo," "J" Brand, and other best brands (in 14-lb. tins) not less than 5 cwt. lots per ton delivered...	66 10 0
Red Lead, Dry (packages extra) ... per ton	37 0 0
Best Linseed Oil Putty ..... per cwt.	0 15 6
Filicol ..... ,,	0 16 6
Size. XD quality ..... ftn.	0 3 0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per ft.		Per ft.
15 oz. fourths ... 2½d.	32 oz. fourths	6½d.
15 „ thirds ... 3½d.	32 „ thirds.....	9d.
21 „ fourths ... 3½d.	Obscured Sheet, 15 oz. ...	3½d.
21 „ thirds..... 4½d.	„ „ 21 oz. ...	4½d.
26 „ fourths ... 4½d.	Fluted, 15 oz. 7d., 21 oz.	9½d.
26 „ thirds..... 6½d.	Rm'lled, 15 oz. 4½d., 21 oz.	6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES. Per ft.

¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White...	5½d.
Ditto, tinted	6½d.
Rolled Sheet	4½d.
White Rolled Cathedral	6d.
Tinned do.	7d.

Cast plate is same price as rough rolled.

"VITA" GLASS.	Per foot s. d.
Clear sheet—not exceeding 1 foot	1 0
Do. do. 2 feet	1 3
Do. over 2 feet	1 9
Polished plate—not exceeding 1 foot	1 6
Do. „ not exceeding 2 feet	2 0
Cathedral—not exceeding 1 foot	1 0
Do. larger sizes	1 6
Horticultural—for greenhouses, etc. Sizes up to 24 inches by 18 inches or not exceeding 2 feet	1 0
3/16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide ...	2 6

ULTRA VIOLET RAY GLASS.

RATLITE.

Up to 2 sq. ft. 1/-. Up to 4 sq. ft. 1/2. Up to 8 sq. ft. 1/3.

FOREIGN.

HORTITEX (HORTICULTURAL).

Up to 1 sq. ft. 7d. Up to 2 sq. ft. 8d. Up to 3 sq. ft. 9d. (Not exceeding 24 in. by 18 in.)
Up to 4 sq. ft. 10d. Up to 8 sq. ft. 11d

VARNISHES, &c.

		Per Gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal.....	ditto	0 18 0
Pale Copal.....	ditto	1 0 0
Pale Opal Carriage	ditto	1 4 0
Best ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 16 6
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting.....	ditto	1 0 0
Hard Drying Oak	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 6
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 12 6
Best ditto	ditto	1 2 6
Best Japan Gold Size.....		0 12 0
Best Black Japan		0 10 0
Oak and Mahogany Stain (water)		0 12 0
Brunswick Black		0 7 0
Berlin Black		0 14 0
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebene		0 9 0
Colrose Black Enamel.....		0 7 0

L.M.B.A. Football League.

Below we give results and tables of the Football League of this Association up to Saturday last :—

RESULTS.

Downs ...	...	2	Trocoll ...	...	2
Higgs ...	...	2	Scafco ...	...	3

TABLE.

					Goals.		
	P.	W.	D.	L.	F.	A.	Pts.
Portland ...	4	3	1	0	13	4	7
Wills ...	3	3	—	—	20	3	6
Trocoll ...	4	2	2	—	26	5	6
Scafco ...	3	1	—	2	7	11	2
Higgs ...	2	—	1	1	5	6	1
Downs ...	4	—	1	3	3	25	1
Elsilrac ...	4	—	1	3	2	22	1

THE SCOTTISH BUILDER

NEW BUILDINGS

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned. Items should be received at THE BUILDER *Office not later than Tuesday evening.*

Denny.—HOUSES.—Denny and Dunipace Town Council have resolved to erect 120 houses on a new site at Herbertshire Park, Denny.

Dundee.—BUILDINGS.—Plans and sections of the following proposed new buildings, etc., have been lodged at the Office of the City Engineer :—Clepington-road—shops for Mr. Alexander Ogilvie; Fairfield-road—garage for Mr. J. B. Milne (Mr. Joseph Johnston, architect, 32, Bank-street); High-street—alterations for the Saxone Shoe Co., Ltd. (Messrs. Gordon & Scrymgeour, architects, 7, Ward-road); Lethnot-street—houses for Mr. Robert Samson (Messrs. Thoms & Wilkie, architects, 21, South Tay-street); Nesbitt-street—bungalow for Mr. William Black (Mr. W. M. Patrick, architect, 26, Yeaman Shore); Nesbitt-street—garage for Mr. William Black (Mr. W. M. Patrick, architect, 26, Yeaman Shore); North-street—extensions for the Dundee Pasteurised Milk Co., Ltd. (Mr. Robert Gibson, architect, 2, India Buildings); St. Mary's-lane—alterations for Bishop Toner and Trustees of R.C. Church (Messrs. Allan & Friskin, architects, 26, Castle-street).

Edinburgh.—REBUILDING.—Mr. E. J. MacRae, A.R.I.B.A., City Architect, has prepared plans for the rebuilding of 25-29, Simon-square; 1-8, Howden-street; and 55-59, East Crosscauseway.

Edinburgh.—EXTENSION.—Edinburgh Dean of Guild Court has granted warrant for extensive work to be carried out at Granton Gasworks.

Edinburgh.—SWIMMING BATH.—Plans for an open-air swimming pond have been submitted to a sub-committee of the General Purposes Committee of Edinburgh Town Council, and it was decided to authorise the Burgh Engineer to obtain an estimate of the cost.

Fraserburgh.—HOUSING.—Four more blocks of houses are to be erected at the Fraserburgh housing area at Gallowhill, and two new streets are to be formed there, one from the south end of Faithlie-street westwards and one from Queen Mary-street opposite to Viewfield-road, southwards.

Kirkintilloch.—HOUSING.—Kirkintilloch Town Council have decided to erect 28 three-apartment houses and 16 four-apartment semi-detached houses on the ground recently purchased by them adjoining Lenzie-road.

Big Cement Contract.

The Cement Marketing Company, Ltd., have received an order for approximately 20,000 tons of cement for the Underground Railway extension from Finsbury Park to Cockfosters. British collieries will benefit by this order since nearly 10,000 tons of coal will be required in the manufacture of the cement.

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'‡ Bricklayers'† Plasterers'.†
Aberdeen	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Airdrie	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Alexandria	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Arbroath	1/6	1/6	1/7	1/8	1/6	1/6	1/7	1/1
Ayrshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Bathgate	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2 1/3
Brewickshire	1/7	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Bo'ness	1/7	1/7	1/7	1/8	1/7	1/7	1/8	†1/2½
Broughty Ferry	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Clackmannanshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Coatbridge	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Dumbartonshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dumfries	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Dumfriesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Dundee	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dunfermline	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Dunoon	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
East Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Edinburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Falkirk	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/1½
Forfarshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/2
Fort William	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Galashiels	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/2½
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Greenock	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	‡1/2½ †1/2½
Hawick	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Helensburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Inverness	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1 1/2
Inverurie	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7½	1/6
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kincardineshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Kinross-shire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Kirkcaldy	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Kirkwall	1/5	1/5	1/5	1/6	1/5	1/5	1/6	1/-
Lanarkshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Leith	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Midlothian	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	‡1/2½ †1/2½
Peebleshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Perth	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Perthshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Peterhead	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7½	1/2
Renfrewshire	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Rothesay	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Roxburghshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
St. Andrew's	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/2½
Selkirkshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Stirling	1/7	1/7	1/7	1/8	1/7	1/7	1/8	‡1/2½ †1/2½
Stirlingshire, West	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Stornoway	1/7	1/7	1/7	1/8	1/7	1/7	1/8	1/1
West Lothian	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8½	1/2½
Wishaw								‡1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 715.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Flotton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	10
Axed in stocks	" "	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1
Setting ordinary register grates and stoves	each	1	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		½"	¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-		72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	0	11
Centre for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		½"	1"	1¼"	1½"
Deal edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights : average size	"	3	9

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1½"	1¾"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

		1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	" "	8	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	10/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	44	0
Do. Do. in flats	"	43	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1¼"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc. for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
⅜-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

*These prices apply to *new buildings* only. They cover superintendence by foreman and carry a profit of 10%, on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

Orpheum Theatre, Finchley-road.

We are informed that the whole of the joinery in this theatre, illustrated in our last issue, was manufactured and fixed by the Central Joinery Co. (1927), Ltd., 179, High-road, Kilburn, N.W.6.

Welding of Monel Metal.

From the Alloy Welding Processes, Ltd., we have received an illustrated booklet which they have just published, entitled "The Welding of Monel Metal and Pure Malleable Nickel," by Mr. N. C. Marples, M.Sc. The subject with which Mr. Marples has dealt may be of interest to a number of our readers, and a copy of the booklet is obtainable from Ferry-lane Works, Forest-road, E.17.

Dorking Public Halls.

The following paragraph from the *Dorking and Leatherhead Advertiser* is of interest:—"Such good progress is being made in the erection of the Dorking Public Halls that the work is about a week in advance of the contract date. To the resident of Dorking who passes the halls daily the rate of progress is not so noticeable, but to the infrequent visitor to Dorking the progress being made is amazing. Unless something exceptional happens, the halls will be ready for opening next January." The contractors for the halls are Messrs. Gaze's, 19-23, High-street, Kingston-on-Thames.

Lightning Conductors.

Builders and others who have to do with the setting up and maintenance of lightning conductors should write to Messrs. W. J. Furse & Co., Ltd., of Traffic-street, Nottingham, for a copy of a booklet just published by them on the subject of "Lightning Conductors, Steeplejacks and their Work," written by Mr. G. A. Collier. We have found this a publication not only practical, but with a fund of anecdote most interestingly put together, and with a number of reproductions of old prints, diagrams, photographs, etc., which add considerably to its use. Messrs. Furse will forward copies gratis to any of our readers.

"Concrete Practice."

Under this title the British Portland Cement Association, Ltd., has issued a brochure intended, primarily, as a guide to the man on the job and containing hints on the methods generally adopted in obtaining first-class concrete. Such questions are dealt with as sampling aggregates, mixing materials, placing concrete, finishing, curing, testing concrete from the works, watertight concrete, shrinkage and expansion and formwork; whilst a most useful section is included which contains tables of quantities, weights of materials, hints to operators of mixer engines, etc. This book, which is available to all who are interested, is bound in a limp cloth cover, and is suitable for carrying in the pocket as a permanent book of reference. A copy is obtainable from 20, Dartmouth-street, S.W.1.

Monomarks for Industry.

We take the following excerpt from the report of the Chairman's speech at the sixth ordinary general meeting of British Monomarks, Ltd., held on September 24:—The commercial monomark was the mainstay of the Company's activities. During the year, from 14,000,000 to 15,000,000 pairs of British boots were manufactured bearing the makers' Monomark, and more than 500,000,000 roofing tiles during 1929 were indelibly stamped with the makers' Monomark. The National Federation of the Furniture Trades had recently recommended the adoption of the Commercial Monomark as the mark of origin for their trade. Orders of £1,500 and £5,000 respectively were quoted in other trades for which the Monomark was responsible. The Commercial Monomark was becoming established as an indication of British goods and as the readiest means of communication.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office*.

Apuldram.—The Cottage, Apuldram, near Chichester, for the West Sussex C.C. Mr. Haydn P. Roberts, F.R.I.B.A., County Architect, North-street, Chichester:—

C. P. M. Blackman, Hunston	£1,140 15
C. H. Hooker, Chichester	786 16
H. J. Penwarden, Bosham	775 0
A. W. Stearn, Itchenor	698 0
Thorn, Son & Vick, Chichester	690 0
T. W. Maidment, Bosham	655 0
A. M. Urquhart, Chichester	650 0
F. Hill, Ltd., Chichester	650 0
*Vick & Sons, Chichester	602 5

Ardsley East and West.—14 non-parlour houses on the Blackgates housing estate, for the U.D.C. Mr. Chas. C. Glover, architect:—

*A. Armitage & Co., Ltd., Windsor-works, Thwaite-gate, Leeds.

Ardsley East and West.—Painting in connection with various housing schemes, for the U.D.C. Mr. Chas. C. Glover, surveyor:—

*Morley Industrial Co-operative Society, Ltd. (Painting Dept.), Albion-street, Morley.

Ashton-under-Lyne.—Rebuilding of the Alma Bridge over Cavendish-street, for the L. & N.E. Rly. Co., in conjunction with the Corporation:—

*Logan & Hemingway, Broadbottom, near Mottram £13,000

Bakewell.—12 semi-detached houses on the Yeld-road site, for the U.D.C. Surveyor:—

*A. E. Twyford, Darley Dale, near Bakewell £4,614

Birmingham.—Premises in Great Charles-street, for the *Birmingham Mail*. Messrs. J. P. Osbourne & Son, architects, Colmore-row:—

*T. Elvins & Son, Naden Works, Soho-hill, Birmingham.

Blackpool.—Senior school, Beach-road, Thornton Cleveleys, for Lancashire E.C. Mr. Stephen Wilkinson, F.R.I.B.A., County Architect, 15, Ribbleadale-place, Preston:—

*R. Taylor & Co., Ltd., Littleborough £26,350
(In lieu of tender withdrawn.)

Blackpool.—Church and Presbytery adjoining the existing buildings in Newton-drive of St. Kentigern's, for the Rev. McManus. Messrs. R. B. Mather, Son & Wilding, architects, 34, Birley street:—

*W. Eaves & Co., Ltd., Blackpool.

Blyth.—Restoration work in connection with the Parish Church, for the Rev. E. C. Kempe, Vicar. Messrs. Naylor, Sale and Woore, F. and A.R.I.B.A., architects, Smith's Bank-chambers, Market-place, Derby:—

*Wm. Wright & Son (Lincoln), Ltd., Lincoln.
(Estimated cost is £3,500.)

Bolton.—Rebuilding the town hall, for the Corporation:—

*R. Mosley, Bolton £570,600

Bolton.—Retaining wall between Rushton-street and the Fish-market in connection with the Bridge-street widening scheme, for the Corporation. Mr. W. Russell Brown, Borough Engineer:—

*John Dickinson & Co. (Bolton), Ltd., Bolton.

Bolton.—Steelwork in the new Market Buildings in Black Horse-street, for the Markets Committee. Mr. W. Russell Brown, Borough Engineer:—

*H. Peers & Co., Bolton.

Bolton.—Reconstruction of the laundry at the Bolton Infirmary, for the Board of Management. Messrs. Bradshaw Gass & Hope, FF.R.I.B.A., 19, Silverwell-street:—

Builders—*W. Gornall & Sons, Ltd.
Plastering and painting—*H. Critchley.
Plumber—*J. Vause & Son.
Carpenter and joiner — *J. & N. Dickinson (1922), Ltd.
Slater—*W. Altham.
Stone—*Bolton Stone, Concrete and Asphalte Co., Ltd.
(All of Bolton.)

Bradford.—Various buildings to accommodate 240 patients, at Westwood Estate, Clayton Heights, for the Corporation. Mr. W. Williamson, F.R.I.B.A., City Architect:—

Masons—	
*F. P. Leach & Sons, Ltd.	£26,696
Joiners—	
*J. Briggs & Son	9,646
Plumbers—	
*L. D. Sunderland	11,748
Plasterers—	
*R. J. Patchett, Ltd.	5,200
Painter—	
*F. Needham	983
Steelwork—	
*H. Barrett & Sons, Ltd.	902
Slater—	
*J. Smithies & Sons	1,928

(All of Bradford.)

Bradford.—Church of St. Cuthbert at the junction of Wrose-road and King's-road, Idle, for the Rev. W. R. Trevitt. Messrs. Ellis & Backhouse, architects, 8, Hillary-place, Leeds:—

*J. Thornton & Sons, Thackley, Idle Bradford £2,500

Brighton.—30 houses at Rottingdean, for the C.B. Mr. D. Edwards, Borough Engineer and Surveyor:—

*Building and Public Works Construction Co., Ltd., Swindon £11,595

Burton-on-Trent.—Garage at the Highways Depot, for the Corporation. Mr. G. T. Lynam, Borough Engineer:—

*G. Hodges & Son, Burton-on-Trent £610

Cannock.—Two detritus tanks, storm tank, two humus tanks, pump house and well, conversion of septic tanks into sedimentation tanks, alteration and extension of sludge beds, etc., and all incidental works at Brewood, for the R.D.C.:—

*M. A. Boswell, Wolverhampton.

Castleford.—Primary school and alterations to existing schools, for the Rev. Canon J. Hewison, St. Joseph's. Messrs. R. A. Easdale & Son, architects, County-chambers:—

*L. J. Gallagher & Sons, Castleford.

Chester.—Relaying the floors of the classrooms at Hunter-street Council school, for the E.C.:—

*W. Delaney, Farnworth, Bolton £134 6

Chester.—For painting and colour-washing of (a) Cherry-grove Council school (girls' dept.) and (b) Holy Trinity school, for the E.C.:—

*(a) Pridday & Son, 41, Foregate-street, Chester £102 10
*(b) E. Williams, 33, Nicholas-street, Chester 159 0

Chester.—Additional works at the showrooms, for the City Council:—

*W. Vernon & Son, Ltd. £207 19

Chipping Norton.—2 pairs of cottages at Chadlington, for the R.D.C. Mr. S. P. Bendle, surveyor:—

†Warr & Taylor, Little Tew, Oxon £1,588

Cleckheaton.—Conveniences at Roberttown Council school, for the Spenborough U.D.C. Mr. A. Rothera, surveyor:—

Mason—*Shenley Brothers, Liversedge.
Joiner—*A. Ellsworth, Liversedge.
Plumber—*J. Kendall, Cleckheaton.
Slater—*A. Thompson & Sons, Ltd., Liversidge.

County Down.—Steelwork, for school, for the E.C.:—

*London and Midland Construction Co., London.

Douglas.—Extensions to Villa Marina, for the Corporation. Messrs. Thomas H. Mawson & Sons, architects, High-street House, Lancaster:—

*Matthews & Mumby, Ltd., 129, Stockport-road, Manchester £25,286

Eccles. — Sub-station in Ermen-road, for the Borough Electricity Committee. Mr. E. C. Elce, Borough Engineer:—

*Corporation Works Department.

Ellesmere Port.—Roman Catholic church, for the Catholic Authorities. Messrs. Edmund Kirby & Sons, architects, 5, Cook-street, Liverpool:—

*Salter Brothers, Ellesmere Port ... £10,000

Epsom.—Various works at Horton mental hospital, for the London C.C.:—

	(*Materials from British source*)	(*Materials from any source*)
Speechley & Smith, Richmond	£2,366	£2,786
Wm. Akers & Co., Ltd., South Norwood	2,151	—
Cropley Brothers, Ltd., Epsom	1,759	1,779
H. H. & F. Roll, Ltd., Epsom	1,725	*1,749
J. W. Billingham, Ltd., Dartford	1,724	1,764

Esher.—Premises opposite "Windsor Arms," Esher. Mr. W. J. Bell, surveyor, Milford Cottage, Littleworth-road:—

*Milham & Sons, Esher.

Farnley.—Open-air school, for the Leeds E.C. Mr. F. Broadbent, architect, Calverley-street, Leeds:—

*Wood Bros. (Leeds), Ltd.

Fleetwood.—Alterations to premises corner of North Albert-street and Victoria-street, for Union Bank of Manchester, Ltd., York-street, Manchester. Mr. Bertram Dunmond, A.R.I.B.A., architect, 54, Adelaide-street, Preston:—

*T. Cottam, Preston.

Glendale.—12 houses at Wooler, for the R.D.C. J. W. Douglas, 27, Bondgate Without, Alnwick, Mr. J. Wightman Douglas, L.R.I.B.A., architect and surveyor:—

*R. Carse & Sons, Amble £5,120
(Subject to M.H. approval.)

Goole.—Alterations and additions and new shop windows to the Marshfield-road premises, for the Co-operative Society, Ltd., Pasture-road, Goole. Mr. F. Turner, architect, Carlisle-street, Goole:—

*Markham & Webster, Goole.

Haverfordwest.—6 parlour type houses at Portfield, for the T.C. Capt. D. F. Ingleton, architect, 9, Victoria-place:—

S. G. Thomas & Son, Pembroke	£3,340
J. Morgan, Neath	3,232
*J. John, Haverfordwest	3,120

Harefield.—New nurses' home at Harefield Sanatorium, near Uxbridge, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect, 10, Great George-street, Westminster, S.W.1:—

Henry Knight & Son	£37,162
L. & W. Whitehead, Ltd.	36,089
C. J. Newby & Bros.	35,830
W. S. Try, Cowley	35,461
Albert Monk	35,350
C. Miskin & Sons, Ltd., St. Albans	35,329
W. Lawrence & Sons, Ltd.	35,161
G. Godson & Sons, Ltd.	34,498
J. Laing & Son, Ltd.	34,240
William Lacey, Hounslow	34,209
‡Fassnidge & Sons, Ltd., Uxbridge	33,837
‡Y. J. Lovell & Son, Gerrards Cross	32,857

(Remainder of London.)

Hawksworth.—Elementary school, for the Leeds E.C. Mr. F. Broadbent, architect:—

*Wm. Thompson & Sons.

Hockmondwike.—Headquarters in Vernon-road, for local Labour Party, to be known as "Keir Hardie" Hall:—

*Briggs & Roberts, Batley.

Hereford.—150 houses on the Hunderton estate, for the Corporation. Messrs. Bettington & Son, architects, Palace-chambers:—

*Garbutt & England, Clitheroe £41,250

Horncastle.—Concrete wall in Lincoln-road, for the U.D.C. Mr. R. Chatterton, clerk:—

*G. W. Horton & Son, Horncastle ... £330 6

Hull.—For (a) construction of a bridge at Dock Office-row, for the Dock Committee, and (b) electric lighting installation at Flinton Grove school, for the E.C.:—

(a) *H. Hill & Co., Ltd., Hull £2,147
(b) *Napier & Wheeldon, Hull 1,074

Ickenham.—Alterations and additions to the Council school, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect, 10, Great George-street, Westminster, S.W.1:—

W. Lawrence & Son, Ltd., London	£9,643
A. & B. Hanson, Ltd., Southall	9,600
Harry Neal, Ltd., Northwood	9,560
Henry Knight & Son, Tottenham	9,506
J. Dorey & Co., Brentford	9,295
William Lacey, Hounslow	9,264
G. Godson & Sons, Ltd., London	9,250
W. S. Try, Uxbridge	9,241
Y. J. Lovell & Son, Gerrards Cross	9,150
‡Fassnidge & Son, Ltd., Uxbridge	9,077

Idle (Yorks).—Rebuilding of the Jowett Motor Works at Five-lane Ends. Messrs. R. D. Fairbank & Son, architects, Halifield-chambers, Manningham, Bradford:—

Building work—*F. Mitchell.
Steelwork—*Hy. Barrett & Sons, Ltd.

Kilsyth.—Miners' Institute, Banton, Kilsyth. Messrs. Galt & Barr, architects, 59, Bath-street, Glasgow:—

*Wm. Hamilton & Son, Townhead-street, Kilsyth.

Kinston Park.—Replacement of existing eaves, gutters and rain water pipes at 186 houses in the parishes of Harthill and Wales, for the R.D.C. Mr. W. M. Gibson, surveyor:—

*T. J. Green & Co., Watson-road, Worksop.

Knutsford.—Fire station and garages at the rear of the Council Offices, Toft-road, for the U.D.C. Mr. A. Butler, surveyor:—

*H. Thomason & Sons, Oughtrington Lymm.

Leeds.—Steelwork, foundation grillages and bases for new premises for Messrs. Lewis's, Ltd. Mr. George W. Atkinson, architect, St. John's House, Merrion-street:—

Walter Scott, Ltd., Leeds	£14,405
Samuel Butler & Co., Ltd., Stanningley	13,629
Edward Wood & Co., Ltd., Manchester	13,503
Moreland, Hayne & Co., Ltd., London	13,373
Keay & Co., Ltd., Birmingham	13,338
Banister, Walton & Co., Manchester	13,308
Braithwaite & Co. (Engineers), Ltd., West Bromwich	13,290
Dorman, Long & Co., Middlesbrough	13,113
*Redpath, Brown & Co., Ltd., Manchester	12,983

Leeds.—Alterations and additions to the "Black Horse" Inn, Holbeck, for Messrs. John Smith's Tadcaster Brewery Co., Ltd. Mr. B. Wilson, architect, Tadcaster:—

*Pickard & Co.

Leeds.—Excavations for new premises, for Messrs. Lewis's, Ltd., of Leeds. Mr. George W. Atkinson, architect, St. John's House, Merrion-street:—

Wm. Thornton & Sons, Ltd., Liverpool	£71,960 0 0
J. T. Wright & Sons, Leeds	71,360 0 0
Wm. Tomkinson & Sons, Liverpool	66,785 9 6
J. & G. Chappell, Liverpool	63,221 6 0
Wm. Moss & Sons, Ltd., Liverpool	60,500 0 0
Wm. Nicholson & Son (Leeds), Ltd., Leeds	56,726 19 8
Armitage & Hodgson, Ltd., Leeds	56,500 0 0
Harold Arnold & Son, Ltd., Leeds	53,748 18 0
Wm. Airey & Son (Leeds), Ltd., Leeds	53,490 0 0
M. Harrison & Co., Leeds	50,922 14 3
*Robert Carlyle & Co., Ltd., Elsinor Works, Old Trafford, Manchester	48,399 0 0

Leeds.—New offices for the Kingston Unity I.O.O. Messrs. Kirk & Tomlinson, 63, Albion-street, Leeds. Quantities by Mr. P. E. Birch:—

*Armitage & Hodgson, Camp-road, Leeds £23,000

Leeds.—Church at the junction of Bridge-street and New York-road, for the Church of the Four Square Gospel:—

*J. Swain.

Leeds.—Alterations to the wharf at Crown Point-bridge, for Messrs. Tunstall's Seyssel and Limmer Rock Asphalte Co., Ltd. Mr. G. W. Atkinson, architect:—

*J. H. Wood & Co.

Leeds.—Alterations and additions to the "Golden Lion" hotel, Beeston-road, for the Leeds City Brewery Co., Ltd.:—

*Wm. Irwin & Co., Ltd.

Lincoln.—Extensions to Spring-hill school, for the City Council:—

*A. E. Thornhill.

Lincoln.—Nurses' home and alterations and additions to the administration block at the City Infectious Diseases Hospital:—

*Wm. Wright & Son (Lincoln), Ltd., Lincoln £6,687

Lincoln.—Alterations and extensions to St. Surthan's Power station, for the City Council:—

*Wm. Wright & Son (Lincoln), Ltd., Lincoln.

Liverpool.—Taking down and removing pigsty to another site at "The Uplands," Queen's-drive, for the Corporation:—

*Rimmer Bros., Dalton-street, Liverpool £106 10

Liverpool.—Road and sewer works on portion No. 4 of the Dovecot Estate, for the T.C.:—

*A. Monk & Co., Ltd., 25, Manchester street, Liverpool £24,000

Liverpool.—Construction of a back street, paving and sewering and incidental works to a block of 5 shops, Stanley Park-avenue, Walton-Clubmoor estate, for the T.C. Director of Housing:—

*Lawrence Marr & Son, Moss Bank, Lodge-lane, Liverpool ... £415 9 11

Liverpool.—Supply, erect, paint, and adapt as football dressing rooms, one secondhand wooden hut (60 ft. by 15 ft.), for the T.C.:—

*Islington Timber and Building Material Co., 42, Soho-street, Liverpool £164 14 6

Liverpool. — Extensions to St. Paul's Eye Hospital, Old Hall-street, for the Board of Management. Mr. Herbert J. Rowse, F.R.I.B.A., architect, 5, India-buildings, Water-street:—

*W. Morrison & Sons, Ltd., Liverpool.

London.—Decorations, etc., at Caxton Hall, for the Westminster City Council. City Engineer:—

F. C. Hoskins & Co., Ltd.	£298 0 0
Walter Lilly & Co.	244 0 0
Army & Navy Co-operative Society, Ltd.	232 0 0
G. & C. Whittle, Ltd.	230 0 0
Sims & Russell	226 0 0
*Edward, Jenner, Ltd.	186 11 3

London.—Clearing the site required for block "E" of the Grosvenor housing scheme, for the Westminster City Council:—

A. Horace Cunis	£880
H. Sabey & Co., Ltd.	860
Willment Brothers	840
Nelson Wise	813
Frederick Wise	381
*Henry Boyer, Ltd.	175

London.—Clearance of the site required for the erection of block "B" of the Grosvenor housing site, for the Westminster City Council:—

Sabey & Co., Ltd.	£700
Nelson Wise	560
Frederick Wise	348
B. Goodman, Ltd.	336
A. Horace Cunis	165
*Henry Boyer, Ltd.	130

London.—New County school at Cambridge-road, Edmonton, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect, 10, Great George-street, Westminster, S.W.1:—

C. J. Newby & Bros.	£56,270
J. Carmichael, Ltd.	54,756
Holloway Bros., Ltd.	53,280
J. Laing & Son, Ltd.	52,989
Higgs & Hill, Ltd.	52,862
William Lacey, Hounslow	52,850
J. Dorey & Co., Ltd., Brentford	52,796
W. Lawrence & Son, Ltd.	52,731
Henry Knight & Son	52,167
Albert Monk	51,490
‡J. Stewart & Sons, Ltd.	50,175

(Remainder of London.)

London.—Buildings at Ebury-bridge for a tuberculosis, dispensary and a maternity and child welfare centre, with five flats over, for the Westminster City Council:—

	Artificial stone.	*Portland stone.*
J. E. Billings & Co., Ltd.	£23,740	£25,081
Holloway Bros. (London), Ltd.	21,868	23,358
Higgs & Hill, Ltd.	21,810	22,560
Ashby & Horner, Ltd.	21,715	23,236
Henry Knight & Son	21,700	23,226
F. & H. F. Higgs, Ltd.	21,620	23,135
P. G. Minter, Ltd.	21,550	23,063
Gee, Walker & Slater	21,395	22,895
Griggs & Son, Ltd.	21,313	22,813
J. W. Falkner & Son	21,135	22,625
Courtney & Fairbairn	21,095	22,640
Prestige & Co., Ltd.	20,980	22,218
Albert Monk, Lower Edmonton, N.9	*20,800	22,297

(All of London.)

London.—Installation of heating arrangements and the carrying out of certain alterations necessary at the Coroner's Court, Horseferry-road, for the Westminster City Council. City Engineer and Surveyor:—

Edward Jenner, Ltd.	£193
John Garlick, Ltd.	179
F. C. Hoskins & Co.	174
Sims & Russell	166
*Walter Lilly & Co., Orchard-Works, St. Ann's-street, S.W.1.	160

(All of London.)

London.—Decorations and repairs to the church, chapel, superintendent's lodge and gatekeeper's quarters, also glazing renewals and painting works to glasshouses at the cemetery at Hanwell, for the Westminster City Council. City Engineer and Surveyor:—

Jamieson & Son	£550 16 8
Parr-Head & Clements, Knowling, Ltd.	475 0 0
E. H. Brooks	468 10 0
G. Holland & Son	398 10 0
*Sims & Russell, Bloomburg-street, S.W.1.	391 0 0

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¶London.—Tenders accepted for H.M.O.W. for the week ending October 18:—

Canterbury district—ordinary works and repairs, J. E. Wiltshire & Co., Stour-street, Canterbury.
Somerset House—electric passenger lift, W. Wandsworth & Sons, Ltd., High-street, Bolton.
Dorking post office and telephone exchange—erection, E. H. Cummins & Co., Ltd., Station-rd., Dorking.
N.P.L. Froude Tank Office Buildings—extensions, H. H. & F. Roll, Ltd., High-street, Epsom.
Forestry Commission, 9 and 10, Saville row, W.1—alterations and adaptations, G. N. Watts, Ltd., 147, High-street, Notting Hill, W.11.
Epsom telephone exchange—erection, Cropley Brothers, Ltd., Church road, Epsom.

London.—Installation of new low-pressure hot-water heating apparatus at George Green's school, Poplar, for the L.C.C.:—

Heating and hot water supply apparatus—	*(Material from any source)*	*(British material)*
The Fretwell Heating Co.	£2,250	—
J. & F. May	2,219	£2,219
Hope's Heating and Lighting, Ltd.	2,090	2,090
Beaven & Sons, Ltd.	2,088	2,088
W. G. Cannon & Sons, Ltd.	2,067	2,064
Clark, Hunt & Co., Ltd.	1,987	1,998
H. & H. Davies & Co., Ltd., Quill Works, Quill-lane, Putney, S.W.14	1,945	*1,962

(All of London.)

New boiler flue, etc.—	
Vigor & Co. (Popiar), Ltd.	£324
W. J. Clemens	318
Arthur H. Inns, Ltd.	311
R. Wollaston & Co.	310
*J. & C. Bowyer, Ltd., Westow-street, Upper Norwood, S.E.19	267

(All of London.)

London.—Men's and women's conveniences and tramway shelter at Parliament Hill Fields, for the St. Pancras B.C.:—

Canonbury Construction Co., Ltd.	£2,807
William Downs, Ltd.	2,616
Moffat Brothers	2,598
Stevens & Sons	2,546
Chas. Berger	2,460
King & Stannard	2,446
*Fairweather & Ranger, 111, Charing Cross-road, W.C.2	2,365

(All of London.)

London.—New greenhouse at the Hither Green Cemetery, for the Lewisham B.C.:—

R. A. Blake & Son	£280 0
H. R. Watt	264 0
Walker, Clinging & Co.	243 0
Burke, Collins & Co., Ltd.	243 0
*Cole, Loasby & Co., Ltd.	234 16

London.—Repairs to steps and tiling in the subway at Parliament-street convenience, for the Westminster City Council:—

*Edward Jenner, Ltd.	£498 15 5

London.—The following works contract has been placed by the War Office during the week ending October 16, 1930:—

Hilsea, R.A.O. depot—re-roofing sheds, J. B. Edwards & Co. (Whyteleafe), Ltd., London, W.1.

London.—Paving of the footways and carriageways of Montreal-place, and the construction of ornamental steps leading from Montreal-place to Aldwych, for the L.C.C.:—

G. Percy Trentham, Ltd., Birmingham	£3,830 0 0
Val de Travers Asphalte Paving Co., Ltd.	3,577 16 4
Improved Wood Pavement Co. Ltd.	3,479 19 0
Acme Flooring & Paving Co. (1904), Ltd.	3,410 7 8
Wm. Griffiths & Co., Ltd.	3,292 16 3
George Wimpey & Co., Ltd.	2,961 6 11
G. J. Anderson	2,912 17 9
*John Mowlem & Co., Ltd., 41, Ebury Bridge-road, S.W.1	2,823 15 4
Chief engineer's estimate	3,317 0 0

(All of London.)

London.—Cleaning and painting work at Caterham mental hospital, for the L.C.C.:—

E. Proctor & Sons, Plumstead	£3,230 12 7
R. H. Runnals & Sons, Ltd., Sutton	2,478 0 0
*H. Lawrence & Sons, Caterham	1,800 0 0
Chief engineer's estimate	2,450 0 0

Lutterworth.—24 houses, for the R.D.C.:—

*P. Rourke, Lutterworth.

Marlow.—Sewage disposal works on the site adjoining the G.W.R. branch line to Marlow, for the U.D.C. Messrs. A. P. I. Cotterell & Son, engineers, 54, Victoria-street, Westminster. Quantities by Mr. R. C. Mathew, 58, Theobalds-road, W.C.1:—

Geo. Wimpey & Co.	£19,380 16
Mussellwhite & Sons, Basingstoke	17,987 0
Durnford Cons. Co.	17,400 0
Sir W. Prescott & Sons	16,793 16
Langley & Johnson, Slough	15,994 7
L. J. Speight, Ltd.	15,604 0
Monnoyer British Cons. Co.	14,909 0
Geo. Bell & Sons	14,640 0
G. H. Gilson & Sons, High Wycombe	14,525 0
*Bracey & Clark, Watford	13,462 0

(Remainder of London.)

Manchester.—Pointing and repairs to various buildings in Heaton-park, for the T.C. City Architect. Quantities by the City Architect:—

Penny & Sons, Ltd., Clayton, Manchester.

Mexborough.—16 parlour type houses and 40 non-parlour type, on the site adjoining the present housing scheme off Harlington-lane, for the U.D.C. Mr. G. Fenwick Carter, surveyor:—

H. E. Pitt & Co., Sunderland	£20,419 12
Jacques & Creeves, Ltd.	20,060 0
W. Blair	20,000 0
E. & J. W. Steel	19,719 0
Wade & Sons, Wath	18,808 0
G. W. Meanley & Sons, Ltd., Mexborough	18,080 0
T. W. Outram	17,506 0
*O. Weaver, Mexborough	17,344 0
Direct Labour Estimate	19,234 0

Meld.—250 yards of 12-inch cast-iron sewer and 930 yards of 18-inch, 12-inch and 7-inch stoneware pipe-sewers, with concrete manholes and other appurtenant works, also construction of additional units at sewage disposal works, comprising detritus tanks, screening chamber, dortmund tank, percolating bacterial filter bed, humus tanks and sludge drying beds and alterations to existing works, for the Corporation. Messrs. W. H. Radford & Son, engineers, Albion-chambers, King-street, Nottingham:—

*Whitley Brothers, Wrexham.

North Witchford.—Eight houses at Wimblington, for the R.D.C. Messrs. Fovargue & Jakens, architects, The Causeway, March:—

Ramsey & Co., Ltd., Willesden	£2,832 0 0
Eggitt & Sons, Ltd., March	2,720 0 0
C. Griffin, Wimblington	2,650 10 0
J. W. Barber, Stanground	2,640 0 0
Goakes & Son, March	2,630 0 0
T. W. Dack, Doddington	2,514 6 6
Turner & Son, March	2,420 0 0
*L. Wilkinson, March	2,330 0 0

(Subject to approval of M.H.)

Pembrokeshire.—Provision and laying 5,000 yards of 3-inch cast-iron mains, with 11,000 gallons reservoir on mountainside, with provision of valves, etc., at Newport (Pem.), also provision and laying 3,000 yards of 3-inch and 2-inch mains, with 18,000 gallons reservoir, at St. Dogmells, for the R.D.C. Mr. H. B. Ward, engineer, North John-street, Liverpool:—

*Fothergill Bros., Ltd., Exeter.

Plymouth.—Steel and concrete balconies at the end of the male and female wards at the City Hospital, for the T.C. Mr. J. Wibberley, City Engineer and Architect, Sun-buildings:—

*Corporation Works Department.

Porthcawl.—Congregational chapel in Fenton-place, for the Trustees. Messrs. R. S. Griffiths & Partners, architects and surveyors, Tonypandy. Quantities by the architects:—

Richard Jones	£4,872 0 0
W. T. Lewis	4,809 0 0
S. T. Rees, Maesteg	4,790 0 0
Eclipse Builders, Porthcawl	4,496 17 6
William Jenkins	4,402 0 0
Robert Meara, Newport, Mon.	4,366 0 0
H. J. Herbert, Pengwenilly, Newport, Mon.	4,356 0 0
Burnell Wilkins, Porthcawl	4,260 0 0
R. B. Thomas	4,202 12 11
Dd. James	4,183 10 0
*J. Thomas, Trealaw	4,070 0 0
Burnell & Sons, Porthcawl	3,994 0 0
J. P. Thomas & Sons, Cardiff	3,910 0 0
T. F. Howells, Cardiff	3,866 0 0
Vickerey Bros., Barry	3,850 0 0

Prescot.—4 houses at east end of "Wood," for the U.D.C. Mr. F. A. Gregson, surveyor, 2, West-street:—

*W. Lacy, Prescot.

Radcliffe.—Central school for 960 scholars, together with clinic, etc., at Peel-park, for the E.C. Mr. William Bradley, L.R.I.B.A., architect, 8a, Acrefield, Bolton:—

*W. Gornall & Sons, Ltd., Bolton ... £52,936

Rotherham.—New infants' school on the Herringthorpe estate, for the C.B. Mr. Vincent Turner, M.Inst.C.E., Borough Engineer:—

*Direct Labour.

St. Helens.—New store at the gasworks, Warrington Old-road, for the Corporation. Gas Engineer:—

*R. Stanley Ellison, Windle City, St. Helens.

St. Neots.—44 houses on Huntingdon-road, for the U.D.C. Mr. T. A. Scott, surveyor:—

*R. Thompson, Doncaster ... £12,940

Scarborough.—Extensions and alterations to the cafe, for the Spa Co., Ltd. Mr. G. H. Fawcett L.R.I.B.A., architect, 3, York-place:—

*A. Sinclair & Sons, Scarborough.

Sheffield.—House at Langsett Reservoir for the T.C. Mr. W. G. Davies, F.R.I.B.A., City Architect:—

*T. Roper & Sons, Ltd., Sheffield ... £369

Shipley.—Ferro-concrete bridge carrying pipe lines over the River Aire, for the U.D.C. Mr. H. Dawson, architect, Somerset House, Shipley:—

*F. Mitchell & Son, Ltd., Manchester.

South Bank.—Premises in Ann-street, South Bank, for Middlesbrough Co-operative Society, Ltd., Victoria-buildings, Clifton-street, Middlesbrough. Mr. W. G. Townsend Gray, architect, 90, Westmorland-street, Newcastle-on-Tyne:—

*Building Department, C.W.S., Ltd., Newcastle-on-Tyne.

Southampton.—217 houses on the Bassett Green housing site, for the C.B. Mr. S. G. Stanton, Borough Engineer, 33, French-street. Quantities by the Borough Engineer:—

*Simms, Sons & Cooke, Ltd., Nottingham ... £83,010

Southport.—Caretaker's cottage on the site of the new senior school at Birkdale, for the Corporation. Mr. W. Allanach, Director of Education, Eastbank-street. Messrs. Grayson and Barnish, FF.R.I.B.A., architects, 606, Royal Liver-buildings, Liverpool:—

*J. Howard, 73a, Shakespeare-street, Southport ... £997

Staffordshire.—Alterations, etc., new out-patients' department and other works in connection, at Staffordshire General Infirmary, for the Board of Management. Sir Aston Webb & Son, FF.R.I.B.A., architects, 19, Queen's-gate, London, S.W.1. Quantities by Messrs. G. Corderoy & Co., Westminster, S.W.1:—

*F. Espey & Sons, Stafford.

Stockport.—Branch bank at Bramhall, near Stockport, for the District Bank, Ltd. Messrs. Francis Jones & H. A. Dalrymple, F. & A.R.I.B.A., 178, Oxford-rd., Manchester:—

*H. Bardsley & Sons, Ltd., Stockport.

Thorne.—Reinforced concrete water tower, for the Thorne and District Water Co. Messrs. Fairbank & Son, chartered civil engineers, The Tudor House, Stonegate, York:—

*K. Holst & Co., Ltd., 1, Victoria-street, Westminster, S.W.1.

Tutbury.—8 pairs of houses in Park-lane, for the R.D.C. Mr. R. S. Litherland, L.R.I.B.A., architect, 10, High-street, Burton-on-Trent:—

G. H. Adams	£9,734 16
G. Peach & Sons	8,210 0
F. C. Jones & Sons	7,628 0
Worthington & Willson	7,618 0
Lowe & Sons	7,551 0
Blood & Sons	7,515 0
R. Kershaw & Son	7,460 0
G. Hodges & Son	7,366 0
Holmes & Son	7,011 0
T. W. Gerrard	6,841 0
*R. Morley & Son	6,519 0
Jas. Warner (withdrawn)	6,196 0

Tenders.—18 houses on the Downingbury site, Pembury, for the R.D.C. Mr. F. Harris, engineer and surveyor, 48, Pembury-road :—

*G. & F. Pons, Ltd., Pembury £5,970

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Torrington.—Improvement of Pannier Market, for the T.C. Mr. E. W. C. Kingsley, Borough Surveyor :—

*Blake & Beer, Torrington £585

Wakefield.—Reconstruction of roofs at the Sandal Magna Endowed schools, for the Governors. Mr. J. Percy Firth, architect :—

*Tunstall's Rock Asphalte Co., Ltd.

Whitehaven.—New bus station, for the Cumberland Motor Services, Ltd. Mr. H. Oldfield, L.R.I.B.A., architect and surveyor, Workington :—

*J. Glaister & Son, Whitehaven £15,000

Whitley.—Extensions to the new sanatorium, for the Leeds E.C. Mr. F. Broadbent, architect, Calverley-street, Leeds :—

*W. M. Coates & Son.

Winchester.—Decorations and structural work to property at Bar End, for the T.C. :—

*Wise & Lansdell, Ltd. £299

Witney.—Sewers, manholes, outfall works, pumping station, storm tanks and other works incidental thereto, for the U.D.C. Mr. A. T. Green, engineer and surveyor :—

A. E. Farr, London	£18,246	2	8
G. H. Gilson & Sons, High Wycombe	14,784	0	0
H. J. Whittam, Hereford	14,710	18	8
T. Free & Sons, Ltd., Bristol	14,424	14	0
The Durnford Const. Co., Ltd., London	14,068	1	6
Sir Wm. Prescott & Sons, Ltd., London	13,906	12	8
J. H. Monds, Newport (Mon.)	13,449	17	3
A. Graves & Sons, Ltd., Milton, Oxon.	13,386	0	0
G. H. Greasley, Ltd., Leicester	12,555	2	4
†W. F. Rees, Ltd., Cheltenham	12,496	12	9

Wormborough.—16 houses on the Ward Green housing estate, for the U.D.C. Mr. T. Shield, engineer and surveyor :—

L. Seagrave, Mexborough	£6,265	1	4
Taylor & Son, Staincross, nr. Barnsley	4,777	0	0
*Edward Oakland & Co., Wombwell	4,480	0	0
Council Engineer's estimate	5,088	0	0

Yeadon.—Branch stores for the Guiseley & Yeadon Industrial Co-operative Society, Ltd. Messrs. Chorley, Gibbon & Foggitt, architects, Park-place, Leeds :—

*Mitchell Yeadon & Sons.

Yorkshire.—For 6 electricity transformer stations at Thornhill, Wakefield, Kirkstall, Batley Keighley and Halifax, for the Central Electricity Board :—

*H. Arnold & Sons, Ltd.

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